

EXECUTIVE SUMMARY

To: Wasatch Front Central Corridor Study Management Team

From: Wasatch Front Central Corridor Study Technical Team

Date: March 2016

Subject: Task 2 Deliverable - Goals and Metrics Documentation

Purpose of this Executive Summary

This document summarizes the process for developing corridor goals and metrics for the Wasatch Front Central Corridor Study (WFCCS). The process included studying community and agency values, refining those values to reflect goal statements, achieving buy-in from all agency partners and executives on the goals, and identifying metrics by which to evaluate the goals. The diagram on the following page outlines the process of achieving consensus on the goals and metrics for the WFCCS. More description is provided following the diagram. In addition, the following materials are attached to this memorandum:

1. Key Person Interview Comments Summary
2. Utah Values Survey (Envision Utah, October 2014)
3. TrendLab Meeting Summary (May 20th, 2015)
4. Matrix of Shared Values
5. Values Assessment Meeting Summary (June 29th, 2015)
6. Executive Agency Briefing (August 28th, 2015)

Wasatch Front Central Corridor Study Goals

The process for establishing the goals is described in the following pages. The goals themselves are listed below. Readers should note that the order of the goals does not indicate their relative priority; all the goals are important.

Corridor Goal Statements

Goal: Improve safety.

Goal: Increase person throughput in the corridor.

Goal: Improve travel time reliability for trips using the corridor.

Goal: Increase regional accessibility to jobs and education, particularly for economically disadvantaged populations.

Goal: Improve air quality.



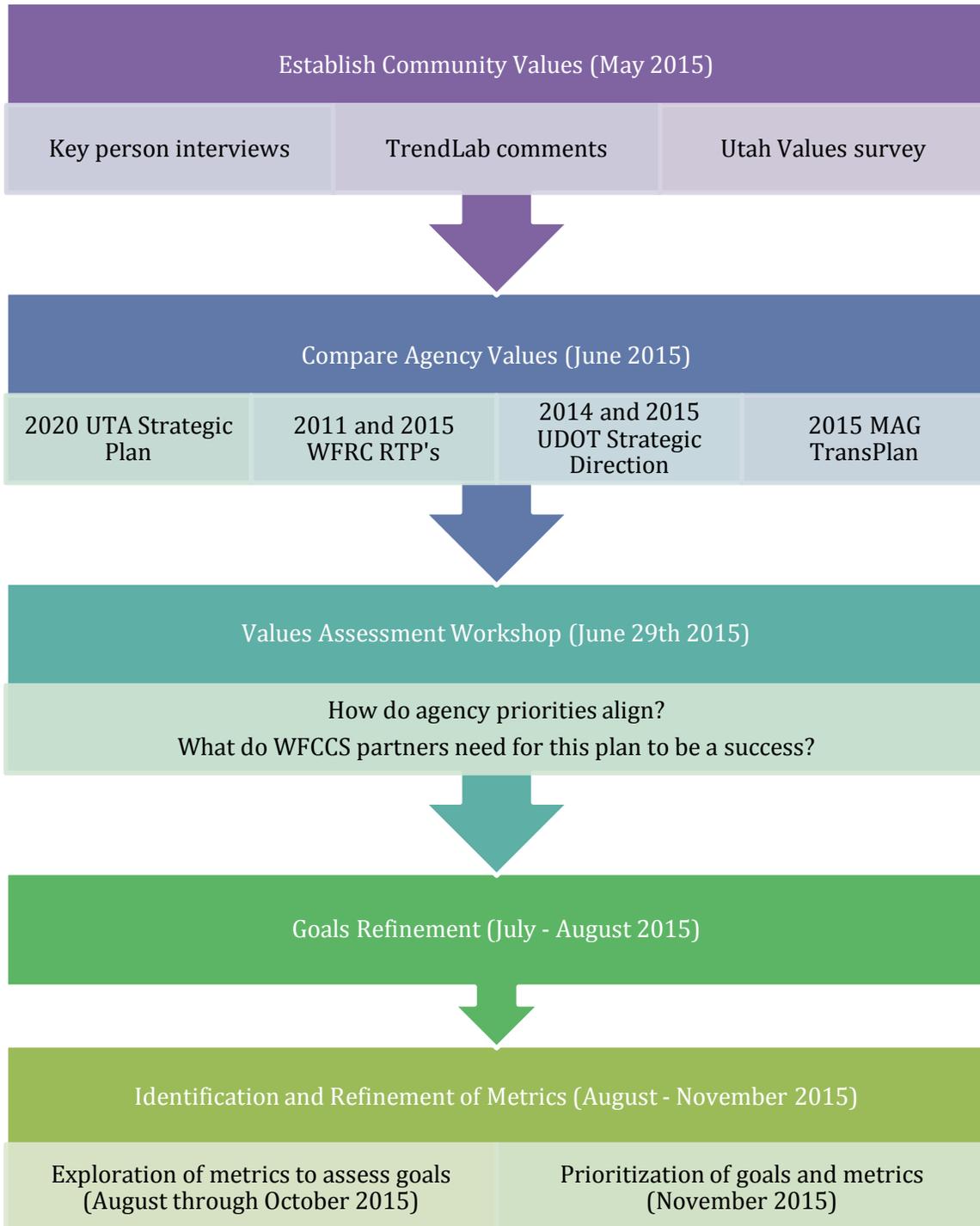
- Goal: Improve economic outcomes while considering both benefits and costs.
- Goal: Reduce direct household transportation costs.
- Goal: Improve mode balance.

Why Establish Corridor-Specific Goals?

The partners of the WFCCS viewed this as an opportunity to create different transportation goals than the agencies had previously focused on as explained below.

- The partners realized that previous efforts that focused on the goals of maintaining congestion and minimizing delay at today's levels were going to be difficult, if not impossible, to achieve in the long run as the Salt Lake area grows.
- The partners understood that new disruptive trends (such as demographic change, new technologies, and economic factors) would likely change how the transportation system functions.
- The partners recognized that this Study was an opportunity to explore goals and metrics that address a wider variety of community needs beyond those traditionally evaluated.

Goals Development Process Diagram



Overview of Goals Development Process

Establish Community Values

The WFCCS team gathered information from several sources to create a foundation of community values for the corridor. This included several sources of information, described below.

- Key person interviews conducted by the WFCCS Communication Team, with key elected officials in selected cities and counties along the corridor. These interviews were conducted in Ogden, Bountiful, Salt Lake City, Murray, Midvale, Sandy, Lehi, Davis County, and Utah County. Interviews focused on what these community leaders wanted to avoid, protect, and create; concerns regarding the success or failure of WFCCS; unique facets of the corridor in their community; and ideas for potential 2050 solutions.
- Feedback gathered from participants at a TrendLab workshop led by the WFCCS technical team. Attendees included technical staff from a variety of disciplines at the four WFCCS partner agencies. The participants provided comments on what to avoid, protect, and create in the corridor, and engaged in discussion on future unknowns and how disruptive trends may affect the corridor. The photo to the right shows the floor maps on which these comments were gathered.
- The Utah Values Survey, released by Envision Utah in 2014. This online survey was completed by 800 Wasatch Front residents, and explored attitudes towards growth in Utah.



Figure 1
Map comments, May 2015 TrendLab workshop

The key person interview summary, TrendLab workshop summary, and Utah Values survey are all attached to this Executive Summary. The information gleaned by the WFCCS team was summarized and prepared for comparison to the stated agency values.

Compare Agency Values

The WFCCS team used published agency strategic documents to identify stated values for each partner agency, and compare values among agencies. The documents reviewed for this purpose are listed below.

- 2020 UTA Strategic Plan
- 2014 and 2015 UDOT Strategic Direction documents
- 2011 and 2015 (draft) Regional Transportation Plans for Wasatch Front Regional Council
- 2015 TransPlan document published by Mountainland Association of Governments.

The WFCCS developed a matrix identifying the values stated by each agency in its documents, and grouping them by topic (mobility, economics, environment, community, safety, state of good repair, accessibility, and security). The Values Comparison Matrix is attached to this Executive Summary.

Stated agency values were then compared to the community values. This exercise demonstrated some similarities between community values and agency values. These are shown in the graphic below. Bold text in the graphic identifies values considered most important to both community

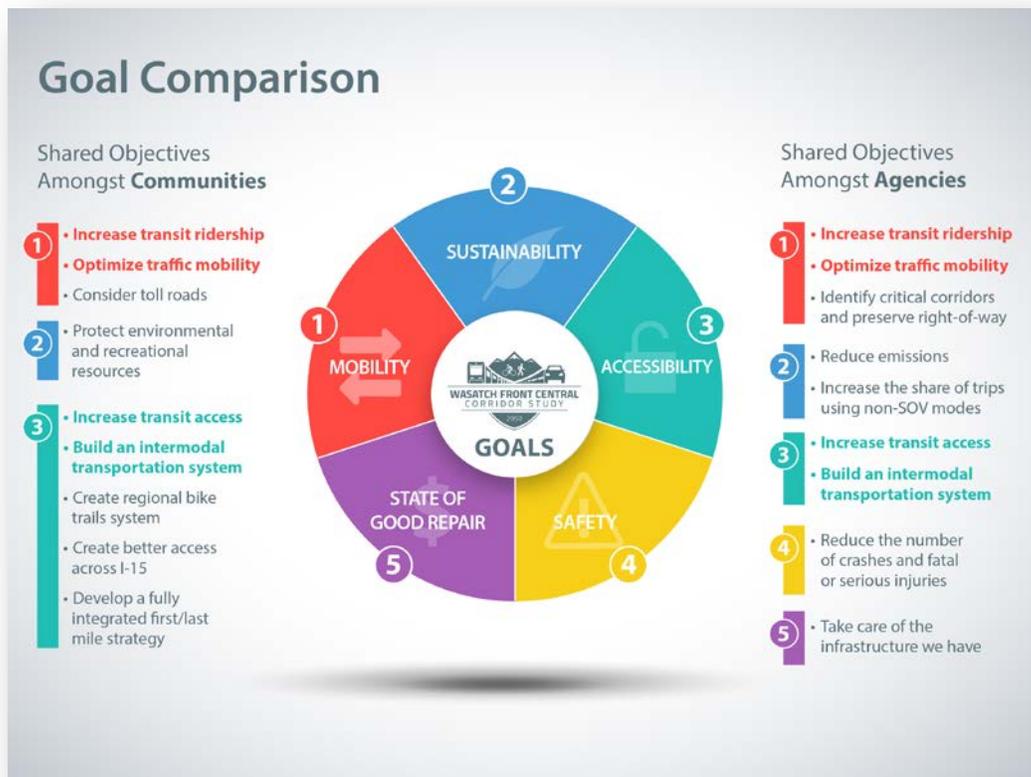


Figure 2: Agency/Community Goals Comparison

members and the transportation agencies. The project team built on this information to begin developing goal statements.

Values Assessment Workshop

The WFCCS team held a Values Assessment Workshop in late June 2015, to review the compared community and agency goals, and begin drafting goal statements for the Corridor. The photo to the right captures some of the discussion from this meeting; meeting minutes from the Values Assessment Workshop are attached to this Executive Summary.

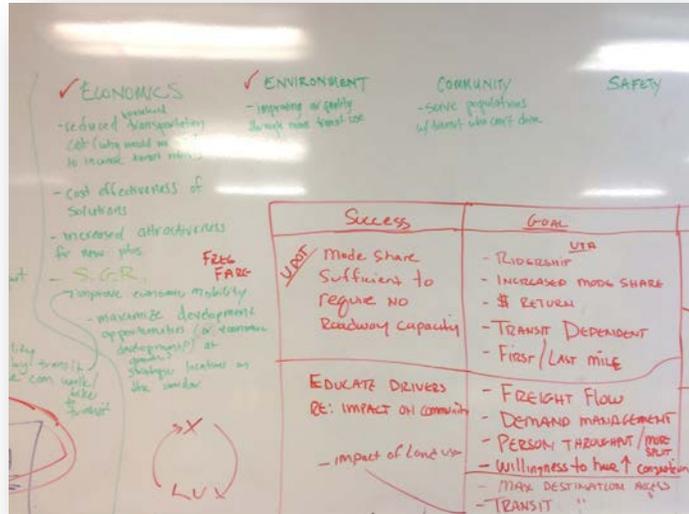


Figure 3: Whiteboard from Values Assessment Workshop

Goals Refinement

During July and August 2015, the WFCCS project team developed goal statements in an iterative process. The resulting goals (provided in the first page of this memorandum, and repeated below) were presented in an Executive Briefing on August 28th 2015 to the agency directors for approval. The directors included Carlos Braceras and Shane Marshall of UDOT, Jerry Benson of UTA, Andrew Jackson of MAG, and Andrew Gruber of WFR. The study purpose and goal statements are provided below. Meeting minutes from the August 28th Executive Briefing are attached to this Executive Summary.

Study Purpose

The Wasatch Front Central Corridor Study will recommend a much-needed plan for 2050 that looks holistically at all modes of transportation and the connectivity between them, including how roads, public transportation, biking and walking can promote choices for getting around. The study will look at innovative solutions to accommodate growth that preserves the region's economic vitality, environmental sustainability, safety, and quality of life for people from all walks of life in our communities. The long-term solutions for the study corridor will need to meet the goal statements below.

Corridor Goal Statements

- Goal: Improve safety.
- Goal: Increase person throughput in the corridor.
- Goal: Improve travel time reliability for trips using the corridor.
- Goal: Increase regional accessibility to jobs and education, particularly for economically disadvantaged populations.
- Goal: Improve air quality.

- Goal: Improve economic outcomes while considering both benefits and costs.
- Goal: Reduce direct household transportation costs.
- Goal: Improve mode balance.

Identification and Refinement of Metrics

The long-term solutions for the Wasatch Front Central Corridor should meet the goals listed above. Upon establishing shared goals, the team identified metrics to use in evaluating the long-term solutions. Metrics can also be viewed as objectives in simplified terms; for instance, an objective of reducing injuries and fatalities is suggested by the “injuries and fatalities” metric under the “improve safety” goal. The metrics associated with each goal were refined from August through November 2015 and are shown in the table below. These metrics will be analyzed for both existing conditions and for each long-term transportation and land use package for 2050 in addition to the “base case” 2050 transportation and land use package.

Table 1: Wasatch Front Central Corridor Goals and Metrics	
Goals	Metrics
Improve safety	Injuries and fatalities
	Percent trips within study area occurring by walking or cycling
Increase person throughput in corridor	Person throughput in peak periods
	Seat utilization by mode in peak periods
Improve travel time reliability for trips using the corridor	Average free flow and reliably congested travel times
	Buffer index
Increase regional accessibility to jobs and education, particularly for economically disadvantaged populations	Area (measured in acres) and average number of jobs accessible within a set driving or transit travel time, including for economically disadvantaged populations
Improve air quality	VMT and air pollutant emissions
	Auto trips that produce cold starts
Improve economic outcomes while considering both benefits and costs	Employment
	Gross regional product
	Personal income
	Ratio of economic benefits to combined cost of construction and long-term operations and maintenance
Reduce direct household transportation costs	Direct household transportation costs
Improve mode balance	Share of households in study area within ½-mile walkshed and 3-mile bikeshed of high-capacity transit
	Non-SOV access mode split to transit stations
	Peak period and daily mode split

Once metrics were refined and agreed upon, the WFCCS team participated in a prioritization exercise to evaluate the relative levels of importance of each goal. This exercise used Decision Lens, an online tool beginning to be applied by UDOT in decision making processes involving multiple individuals. The Decision Lens exercise took place in early November 2015 and included representatives from each of the partner agencies, as well as the consultant leaders of the technical and communication teams. This process requires participants to weigh one goal against another using a numeric scale.

The combined rankings are shown in the graphic below. This indicates that the goal to “improve economic outcomes while considering both benefits and costs” was ranked as the most important to the WFCCS management team, followed by “improve mode balance” and “increase regional accessibility to jobs and education”. This information may be applied when long-term solution packages are fully developed and analyzed, to prioritize those packages that best meet the highest-ranked goals.

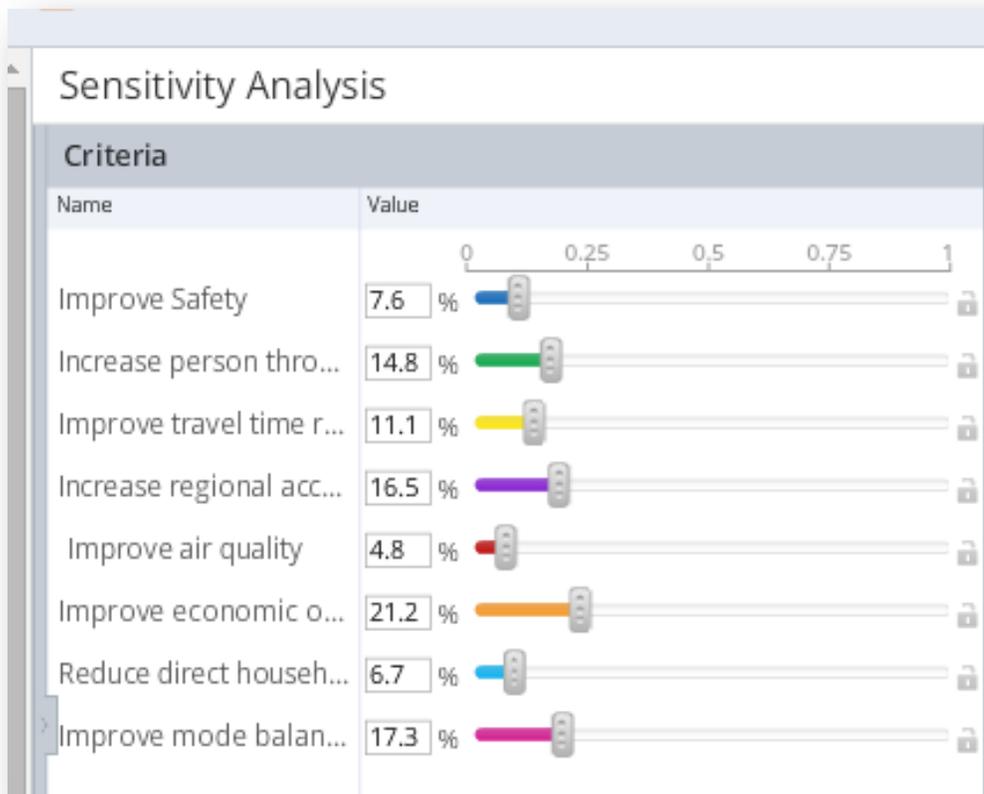


Figure 4: Decision Lens results from group exercise, November 2015

Exhibit 1: Key Person Interview Comments

Key Person Interviews Summary

Introduction

Early in the planning phase of the study, The Langdon Group conducted both internal and external stakeholder interviews. The internal interviews were conducted with members of the management team and their executives and served to inform the partnering meeting agendas, identify areas of potential communication challenge, and understand baseline goals and worries about the upcoming study process.

The external interviews were conducted with a number of cities in the study area and these served to:

- Gather input to help inform project goal setting and values assessments;
- Help shape the stakeholder and communication plans;
- Create initial awareness of and excitement about study; and
- Begin to engage with cities to understand important details about each unique community (this process will be ongoing in the engagement process).

The following pages summarize the key takeaways and themes from these interviews.

Interview Themes

Internal

Management Team:

- Facing difficult issues head on
 - Having the courage that the communication structure in place to actively engage with tough topics and not to shy away or avoid these.
- Defining our desired outcomes
 - Clear goal setting and specific, shared vision of final product is important.
- Equal level of commitment
 - There is some nervousness what would happen if some agencies are less committed than others during the study.
- Clear expectations about communication.
 - The team all agree that success will come down to good communication and want to have a shared set of operating instructions on how this will happen.
- Everyone is excited about doing things differently.
 - All members are excited about what it will mean to do things differently and nervous about falling short of this or losing sight of it.

Executive Team:

- Four agencies working together
 - Working as one team (check titles and organization name at the door)
 - Shared vision of Keep Utah Moving (moving people, not cars)
 - Effective leadership is key to project success
- Communication
 - Lisa Zundel as neutral leader is important, can't fall back on UDOT ties
 - Communication between the executive and the designated project manager from each organization
 - Trust is important, it's how good projects become great
- Decision Making
 - Consensus based approach
 - Empowering management team members is essential
 - Escalation. Not viewed as a failure. Engage executives quickly when needed.
- Outside the Box Thinking
 - Role of technology in the future
 - Thinking beyond just moving everything to transit in the future (what's next?)
 - Creative ideas and motivation for behavior change
 - Involve futurists
 - We are on the verge of big things happening with tech and transportation
 - Don't just look through lens of transportation
 - Balance outside the box ideas with what can be funded

Other Important Notes:

- Make sure models are all agreed upon ahead of time – this could be a stumbling block when final decisions are needed
- Overall concerns that UDOT is poised to “take over” if things go wrong
- Regular and clear communication between Management Team member and their Executives is imperative to success
- Agreement about tough issues (e.g. role of land use) must be done right away and in clear detail
- Misunderstandings about agency's motives and goals could be the demise of trust – get these out in the open and discussed early

External

Because each community is unique, it is very important to read each individual entry in the attached spreadsheet summarizing the interviews. Below are some recurring themes from City interviews:

E/W Connectivity – Most communities talked about improving east west connectivity including surface streets and additional throughput under I-15 to reduce freeway demand and connect communities

Transit – Most communities point to a big shift to transit and a big part of the future. Most point out that behavior change and access (parking, first/last mile, additional service off the main N/S) as biggest barriers. Should be more affordable.

Challenges – Potential for UDOT to take over process, solutions must be multi-modal don't focus on just cars, not being visionary enough

Success – A successful project must address funding, nearly every City emphasized this. Also successful deliverable will include details about how to catalyze behavior changes needed, will be specific and not just conceptual



Exhibit 2: Utah Values Survey (Envision Utah, October 2014)



a Wirthlin inspired consultancy



2014 Values Study Results

October 16, 2014

WITH INNOVATIVE RESEARCH WE
YOU UNDERSTAND HOW TO ENGAGE
THE HEARTS AND MINDS OF PEOPLE
WITH INNOVATIVE RESEARCH WE
YOU UNDERSTAND HOW TO ENGAGE
THE HEARTS AND MINDS OF PEOPLE

Objective

The objective of this work is to quantitatively identify Utahn values and priorities underlying the issues, attributes, and themes related to the future of Utah.

Quant Methodology



MODE

Online



LENGTH

20 minute survey



DATES

August 25 – September 8, 2014



AUDIENCE

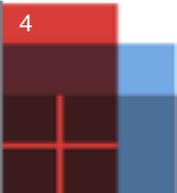
Utah Resident, Age 18+.

Urban (n=800): Resides in one of the following counties:
Davis, Salt Lake, Utah, Weber

Semi-Rural (n=87): Resides in one of the following counties:
Cache, Morgan, Summit, Tooele, Wasatch, Washington

Rural (n=113): Resides in one of the following counties:
Beaver, Box Elder, Carbon, Daggett, Duchesne, Emory,
Garfield, Grand, Iron, Juab, Kane, Millard, Piute, Rich, San
Juan, Sanpete, Sevier, Uintah, Wayne

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Executive Summary

Quality of Life and State Priorities

- Utahns enjoy a high quality of life—well above what others report nationally. Three in four like the direction their communities are headed and anticipate things getting better in the future—including the economy. This reflects a sharp improvement and recovery since last measured in 2007.
- Many factors are considered important to the future of the state—no single issue dominates over the others. In fact, the research clearly shows an interconnectedness to the issues and their connection to the personal values of the people who live here.
 - The importance of these priorities to the future of the state are widely shared—similar regardless of age, income, or religious differences
- Overall, Utahns believe the state is doing a good job on most of the issues. Performance on two stand out in a positive way: Outdoor recreation and Economic Development/Jobs. Performance on two others stand out at the other end: performance in Education is mediocre and performance on Air Quality is sub-par.

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Attitudes Toward Growth

- Most Utahns believe that growth in the state brings many benefits and should be encouraged and fostered. While rural residents share that point of view overall, the support for continued growth is not quite as strong among rural residents.
- The majority of residents (three quarters) continue to mistakenly believe that new growth is originating from outside of Utah. However, compared to prior years, an increase is seen in the number of Utahns mentioning new births as the primary source of growth.

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Attitudes Toward Growth (continued)

- Utahns are growing less sure of who can best deal with growth issues in a way that will have a positive impact on the state. In particular, Utahns are much less confident in their own abilities to deal with growth issues. Unfortunately, this has not been replaced with an increased confidence in state or local government or private business. Instead, there is just a growing number who don't know who to trust.
- It should also be noted that Rural residents are less trusting of state government than Urban residents—not to mention an even stronger distrust in federal government.

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Global Warming

- Despite the fact that Utahns are less concerned with global warming now than seven years ago, four out of five still have some level of concern about the issue.

The Local Economy

- + A majority of Utahns believe that the state's local economy is improving although most feel that it lies "somewhere in between" being strong and weak.
 - Urban residents are more likely than Rural residents to categorize the economy as strong and improving.

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Utahn **Personal** Values

- One core values orientation focusing on the people that live here continues to shape what Utahns personally prize most about the state:

Friendly neighbors with shared values that creates a safe environment to raise children and an overall sense of community, promoting peace and personal security.

- This is the dominant orientation for about one third of residents across the state (similar for rural resident who also describe this as “rural lifesytle”)

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Utahn **Personal Values**

- + There are two other positive values orientations that contribute to the high level of quality of life people feel in their personal lives:

- **Cost of Living/Economic Opportunity**

The availability of good paying jobs coupled with a low cost of living generates more income to buy more and do more. Residents can provide for their families, ensuring that they can remain in Utah. This gives a sense of financial security while making things better for future generations.

- **Scenic Beauty/Outdoor Recreation**

The scenic beauty of the region and outdoor recreational options provide abundant opportunities for and quality time to enjoy with friends and family. Being active outdoors helps to promote healthier living, personal enjoyment and happiness.

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Utahn **Personal Values**

+ Two negative values orientations detract from the quality of life—one impacting urban residents and one impacting rural residents:

- **Poor Air Quality [Urban Residents]**

Poor Air Quality is just not Healthy for me or my family. It leads to illness, Stress and lack of Security for Future Generations.

- **Overbearing Federal Government [Rural Residents]**

An Overbearing Federal Government is simply constraining. It negatively impacts the local Economy and makes you feel as though you've Lost Control over things that should be within your right. This leads to a sense of lack of personal Freedom.

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Agriculture

- In 2007, almost a third of Utahns did not have a strong opinion about farming and ranching. It is now widely felt (74%) that farming and ranching are critical to the future of Utah—important to maintaining the land and values that make Utah a great place to live.
- In order to protect agricultural land and water in Utah, residents believe that financial incentives are the most effective approach. Previously, regulations were favored but perspectives have shifted.

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Housing

- Utahns strongly support a variety of housing types (e.g. single family homes, townhomes, apartments) in a community and cite several reasons:
 - Making it possible for those who work in the community (police, school teachers, firefighters) to afford to live there is the most compelling reason for different housing options.
 - Better air quality due to close proximity and less traffic congestion also top the list.

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Differences in Urban and Rural Residents

- For the most part Rural residents share the same state level priorities as Urban residents. There are, however, few areas where views diverge between Urban and Rural residents:
 - Rural residents place a lower priority on air quality, transportation, and preparation for disasters than Urban residents. Agriculture is more important for Rural residents. Moreover, Rural residents are more likely to feel the state is not doing a good job on economic development and jobs.
 - Residents in Semi-rural areas put a bit less of a priority on education and put more priority behind the planning that goes into how cities and towns grow. Semi-rural residents also put a slightly higher priority and performance rating for healthcare, natural lands, and outdoor recreation.
- Perhaps the most notable difference among Rural residents is the high level of concern and unhappiness with the federal government. A new personal values pathway emerged from the values research. It is best described by the feeling that the federal government has become overbearing, negatively impacting local control, economic opportunity and growth, trust in government and ultimately freedom. The energy behind this values orientation comes mostly from the rural residents—this is the dominant orientation for more than one in ten (13%) of all rural residents!
- When it comes to planning growth in Rural Utah, better educational opportunities, healthcare close to home and improved or expanded water infrastructure emerge as the most important items among Rural residents.



DETAILED FINDINGS

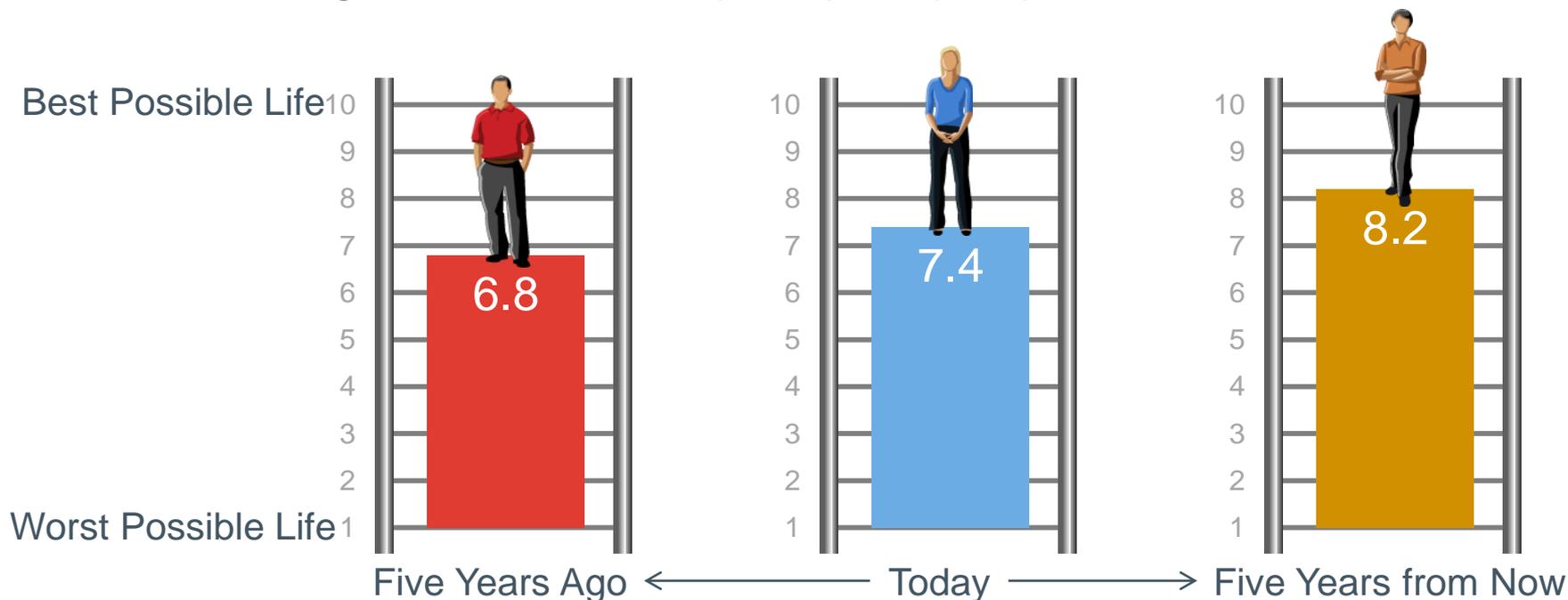
Detailed Findings

QUALITY OF LIFE

Utahns as a whole, and Urban residents specifically, believe their overall quality of life is increasing.

Ladder of Life

Mean rating on a scale from 1 (worst) -10 (best)



Urban residents more likely to view quality of life as increasing (69%) vs. Rural/Semi-Rural residents (58%).

BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q200. Now please imagine a ladder that represents your quality of life. The ladder has 10 steps and the tenth step represents the best possible life for you and the first step represents the worst possible life for you. On which step would you say you personally stand at the present time?

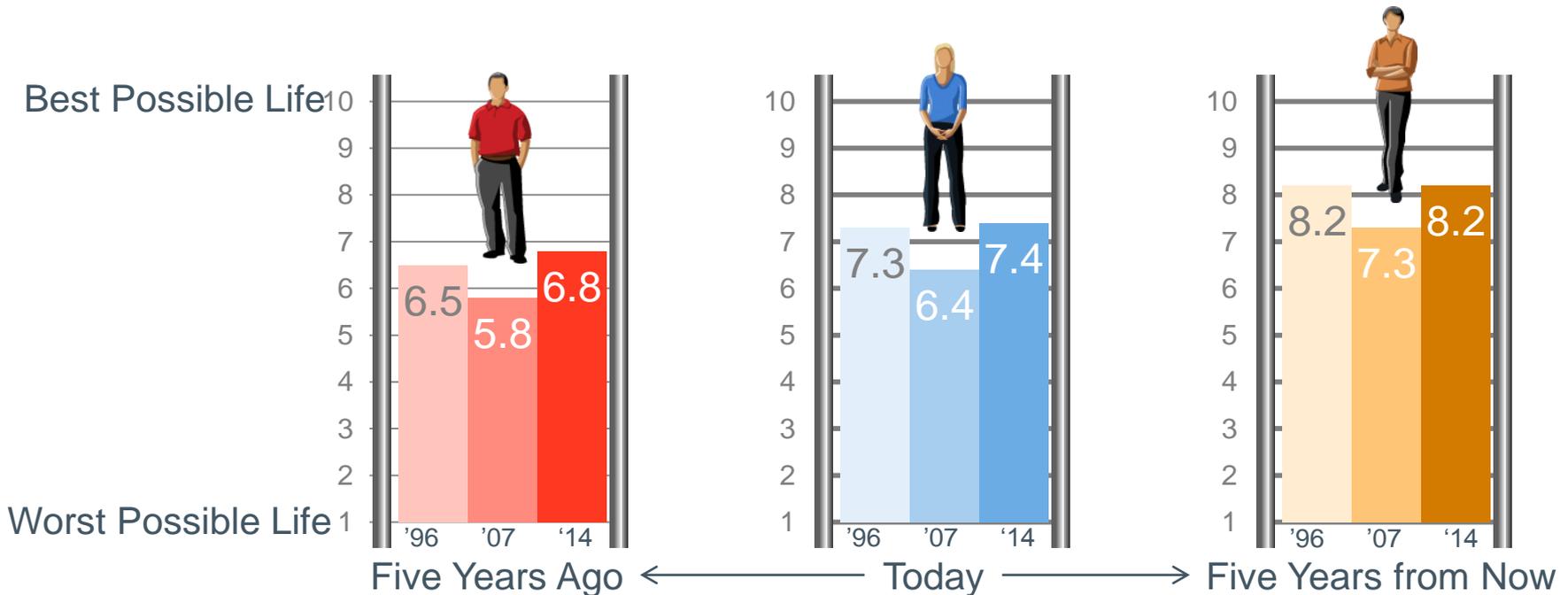
Q205. Still thinking about the ladder that represents your quality of life, on which step would you say you stood 5 years ago?

Q210. Still thinking about the ladder that represents your quality of life, using your best guess, on which step will you stand 5 years from now?

Perceptions of quality of life in Utah are similar to those of 1996, fully recovering from their downturn in 2007.

Ladder of Life

Mean rating on a scale from 1 (worst) -10 (best)



BASE: ALL QUALIFIED RESPONDENTS (N=1000)

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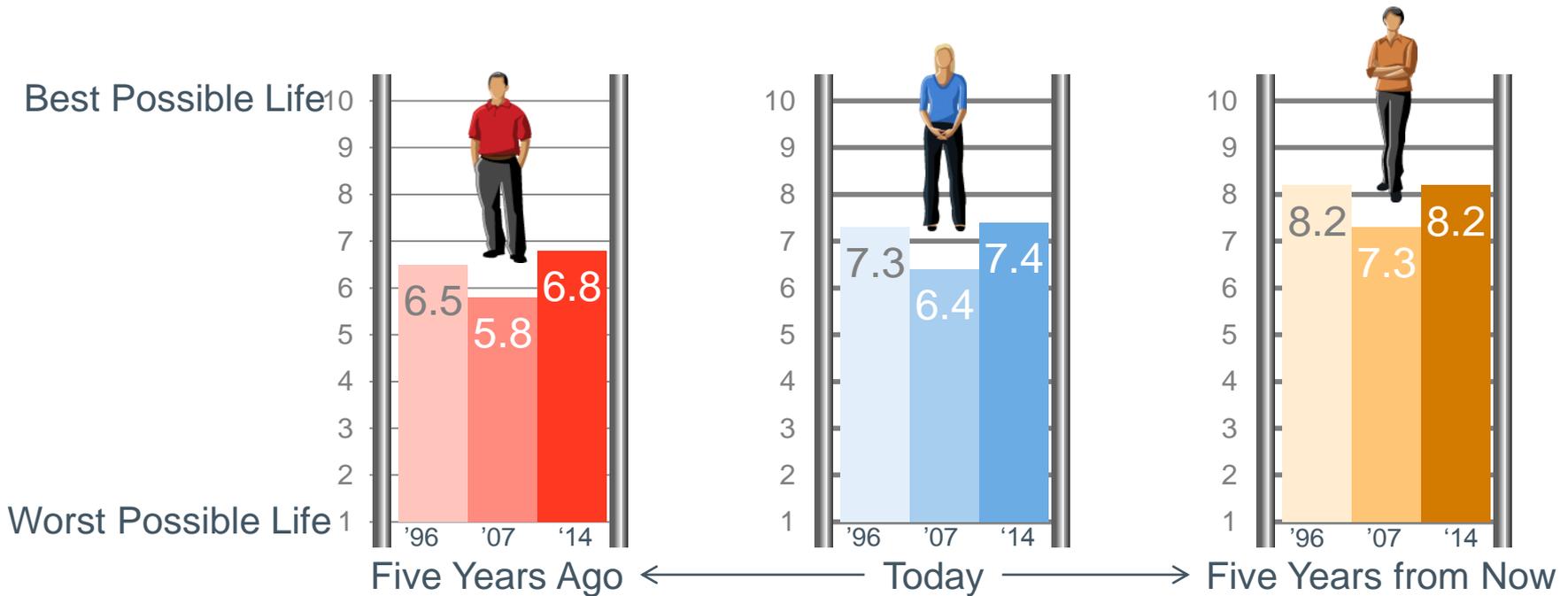
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Perceptions of quality of life in Utah are similar to those of 1996, fully recovering from their downturn in 2007.

Ladder of Life

Mean rating on a scale from 1 (worst) -10 (best)



US	6.1	6.1	6.8
SD	6.5	6.6	7.3
Omaha	6.5	7.0	7.7
Orlando	6.2	7.0	7.8

BASE: ALL QUALIFIED RESPONDENTS (N=1000)

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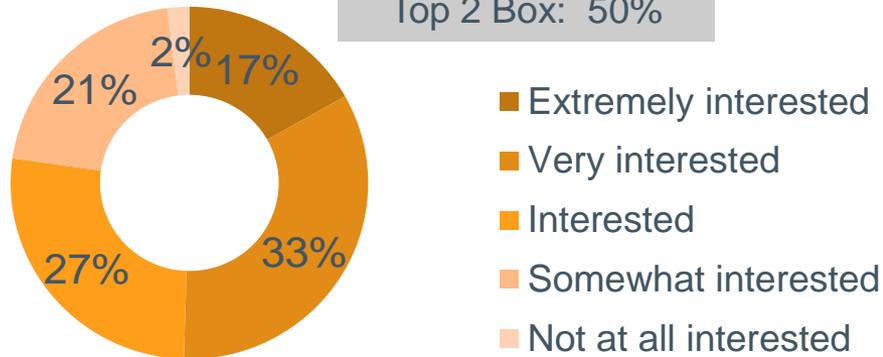
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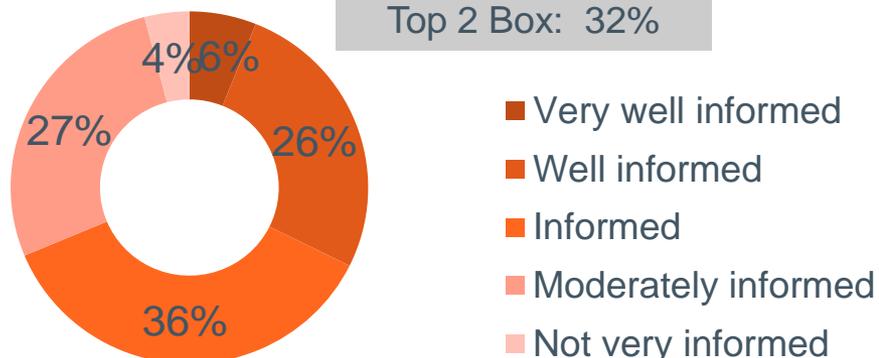
Half of Utahns are very or extremely interested in issues relating to their quality of life, though only one third consider themselves very or well informed about the issues.

Issues Relating to the Quality of Life in Utah

Level of Interest



How Informed They Are



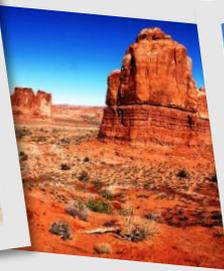
BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q300 There are a lot of issues in the news, and it is hard to keep up with them everyday.

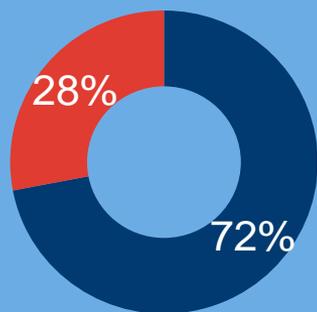
Please indicate how interested you are in issues relating to the quality of life in Utah (such as transportation, housing, air quality, education...).

Q310 How informed are you about issues relating to the quality of life in Utah?

A majority of Utahns feel their community is headed in the right direction and identify mostly positive aspects with regard to their quality of life in the state. However, only half predict an increasing quality of life for future generations.

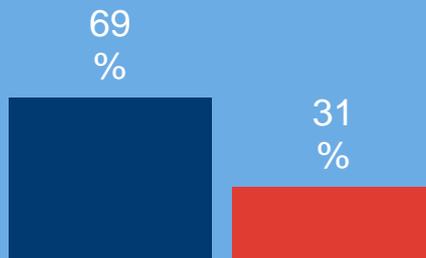


Direction of Own Community



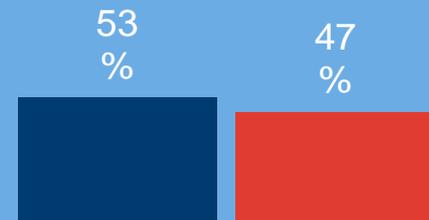
■ Right direction
■ Wrong track

Quality of Life in Utah: Positives vs. Negatives



Positive Negative

Quality of Life in the Future



Increasing Decreasing

BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q325. Now, thinking about your own community, do you feel like things are going in the right direction today or do you feel things have pretty seriously gotten off on the wrong track?

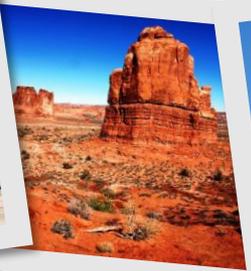
Q330. Thinking about all the positive and negative aspects about the quality of life here in Utah, what percentage of things would you classify as positive? What percentage is negative?

Q340. Thinking about the quality of life that will be here for your children and grandchildren, do you see their quality of life in Utah increasing or decreasing in the future?

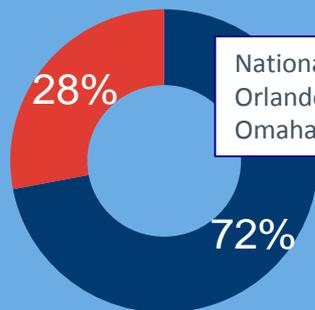


Envision Utah
How we grow matters.

A majority of Utahns feel their community is headed in the right direction and identify mostly positive aspects with regard to their quality of life in the state. However, only half predict an increasing quality of life for future generations.



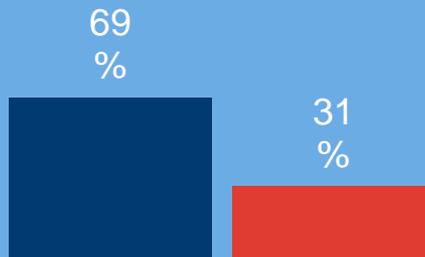
Direction of Own Community



Nationally: 29% RD
Orlando: 60% RD
Omaha: 60% RD

■ Right direction
■ Wrong track

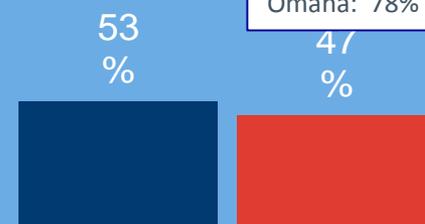
Quality of Life in Utah: Positives vs. Negatives



Positive Negative

Orlando: 60/40
Omaha: 71/29

Quality of Life in the Future



Increasing Decreasing

Nationally: 44% increasing
Orlando: 64% increasing
Omaha: 78% increasing

BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q325. Now, thinking about your own community, do you feel like things are going in the right direction today or do you feel things have pretty seriously gotten off on the wrong track?

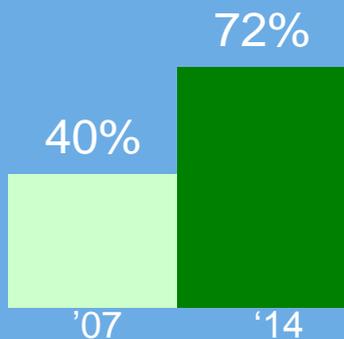
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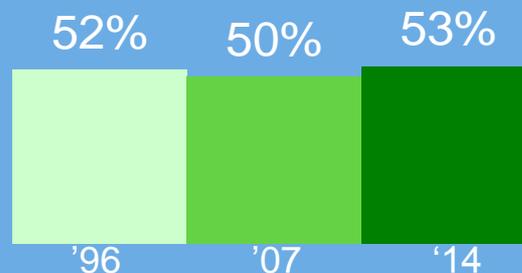
More believe their community is headed in the right direction in 2014 compared to 2007, though projections for an improved quality of life remain unchanged.



Direction of Own Community: Right Direction*



Quality of Life in the Future: Increasing



*"Not sure" category included in 2007

BASE: ALL QUALIFIED RESPONDENTS (N=1000)

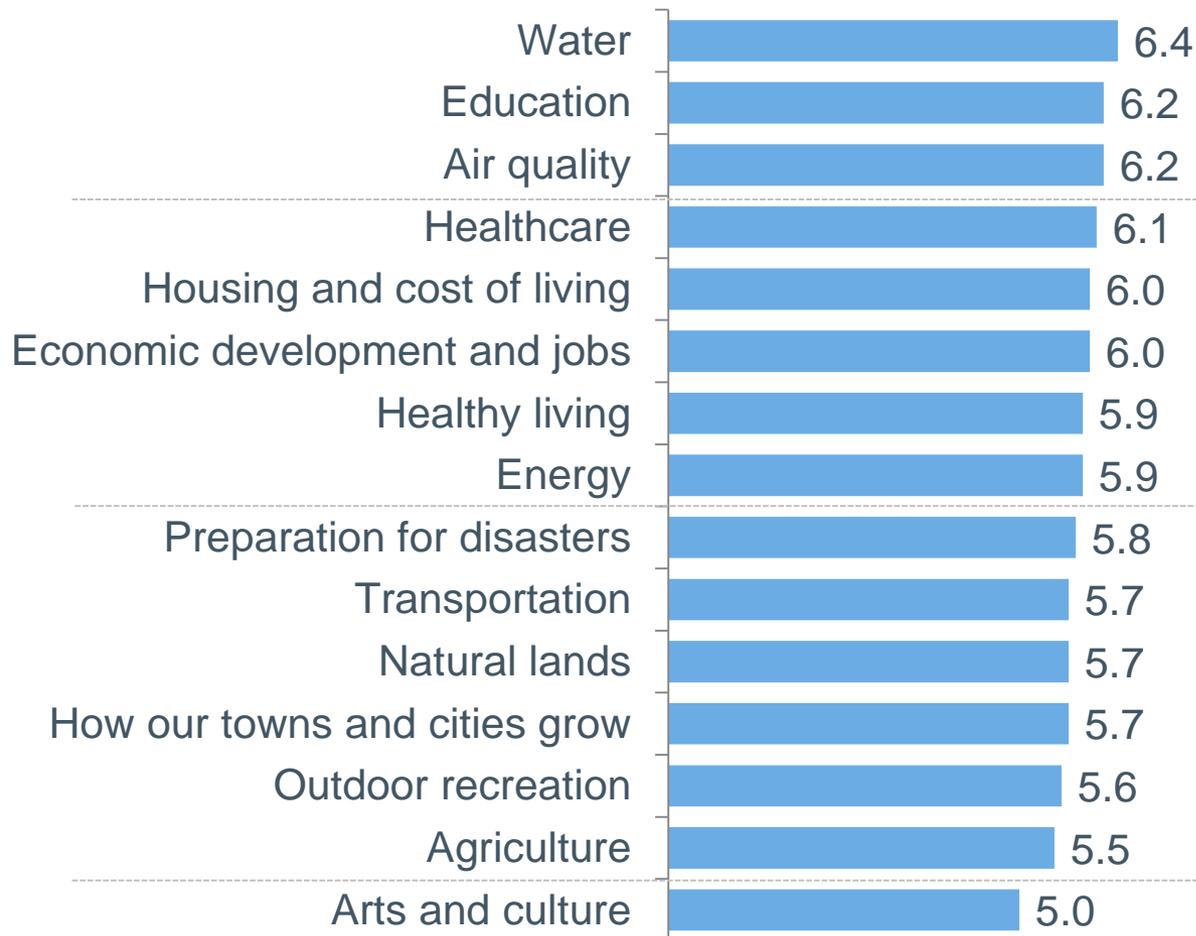
Q325. Now, thinking about your own community, do you feel like things are going in the right direction today or do you feel things have pretty seriously gotten off on the wrong track?

Q330. Thinking about all the positive and negative aspects about the quality of life here in Utah, what percentage of things would you classify as positive? What percentage is negative?

Q340. Thinking about the quality of life that will be here for your children and grandchildren, do you see their quality of life in Utah increasing or decreasing in the future?

Priorities for the State of Utah

Mean Importance to Utah's Future



More Important to **Urban** residents:

- *Air quality*
- *Transportation*
- *Preparation for disasters*

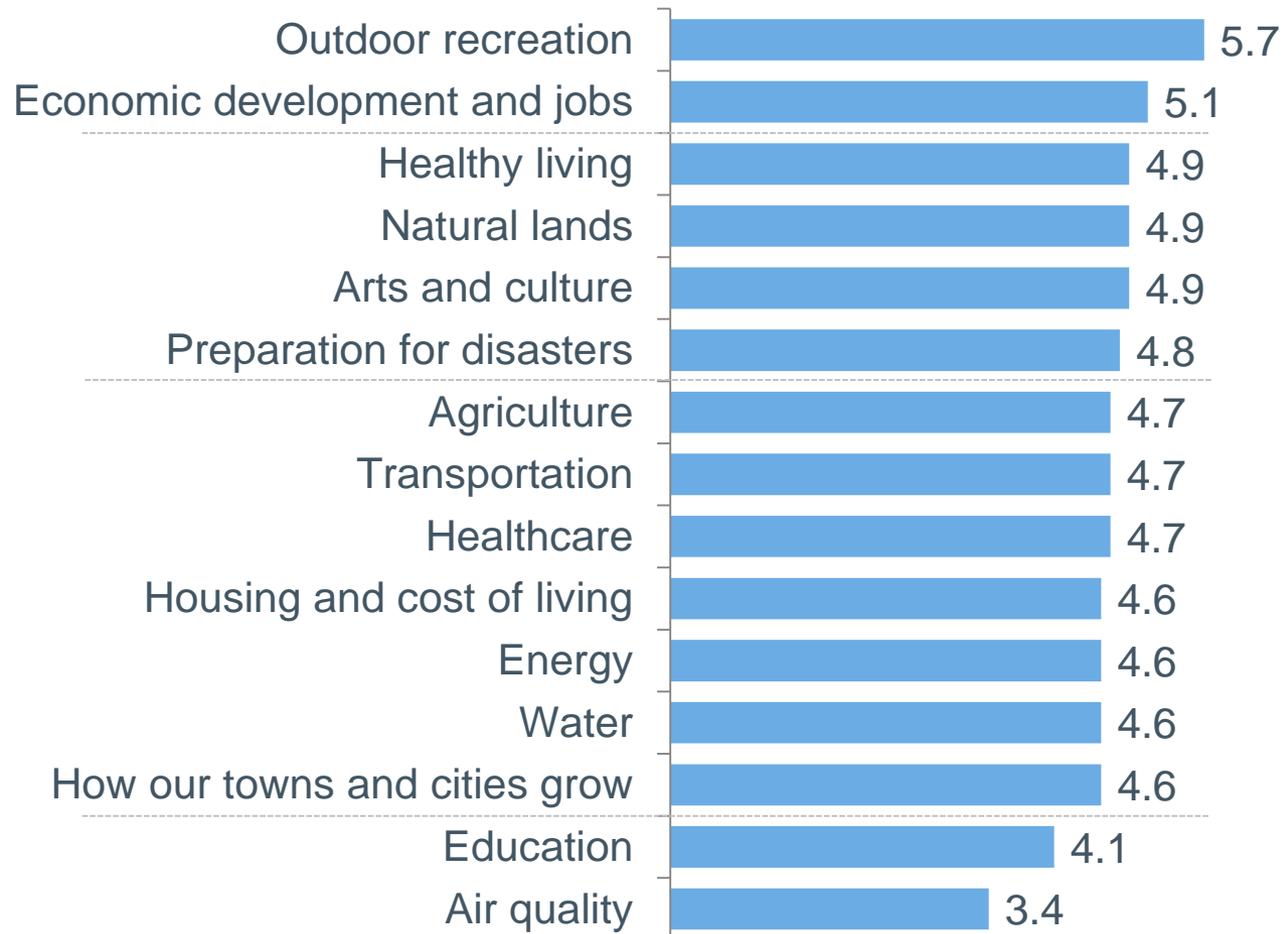
More Important to **Rural** residents:

- *Natural lands*
- *Outdoor recreation*

BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q315. Thinking about the community where you live, please rate each of the following issues where 1 means "not at all important to Utah's future" and 7 means "extremely important to Utah's future."

Performance on Priorities for the State of Utah



Rural residents indicate higher performance:

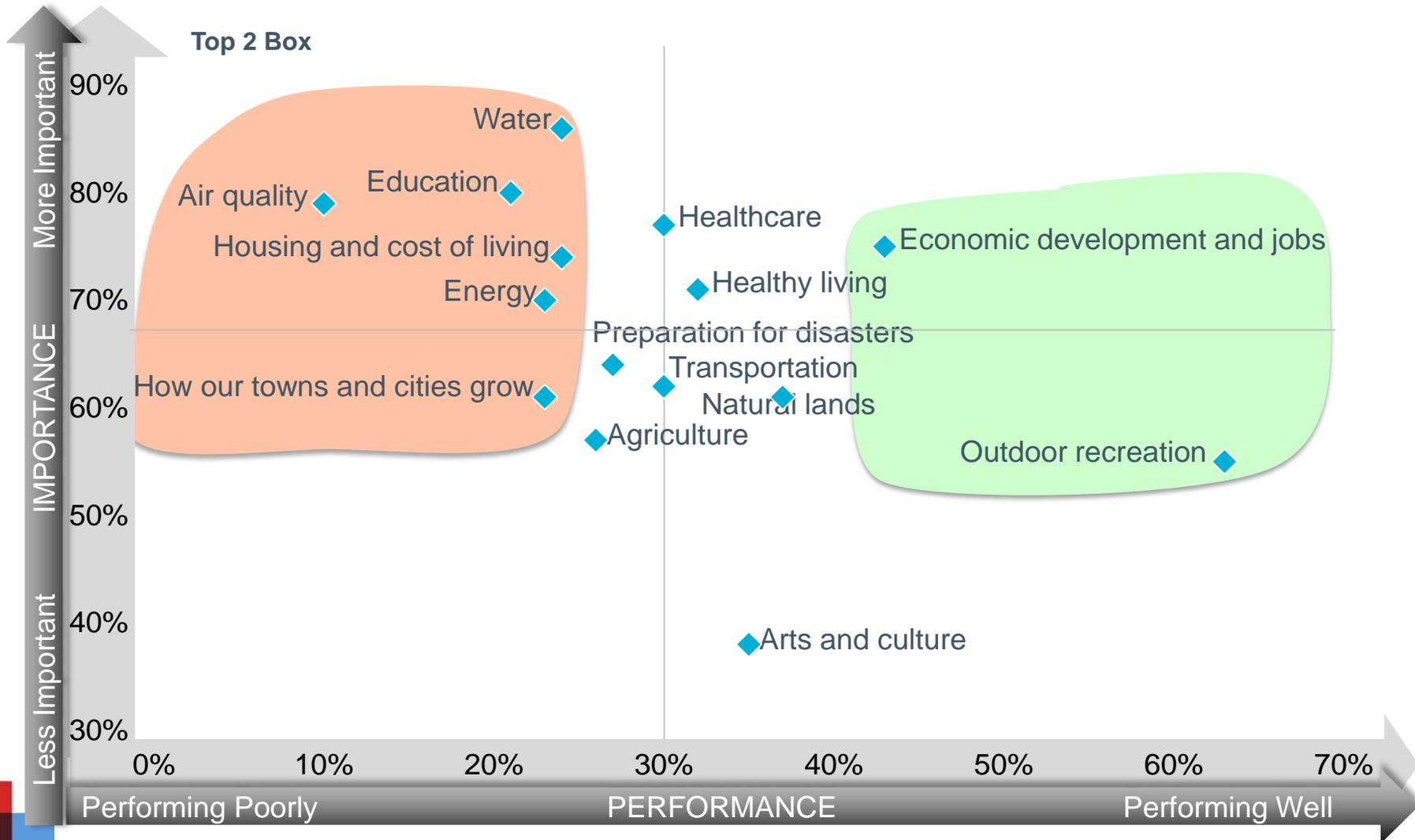
- *Agriculture*
- *Air quality*

BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q320. Please indicate how well you think Utah is performing on each of these priorities using the scale where 1 means "the state is not performing well at all" and 7 means "the state is performing extremely well."

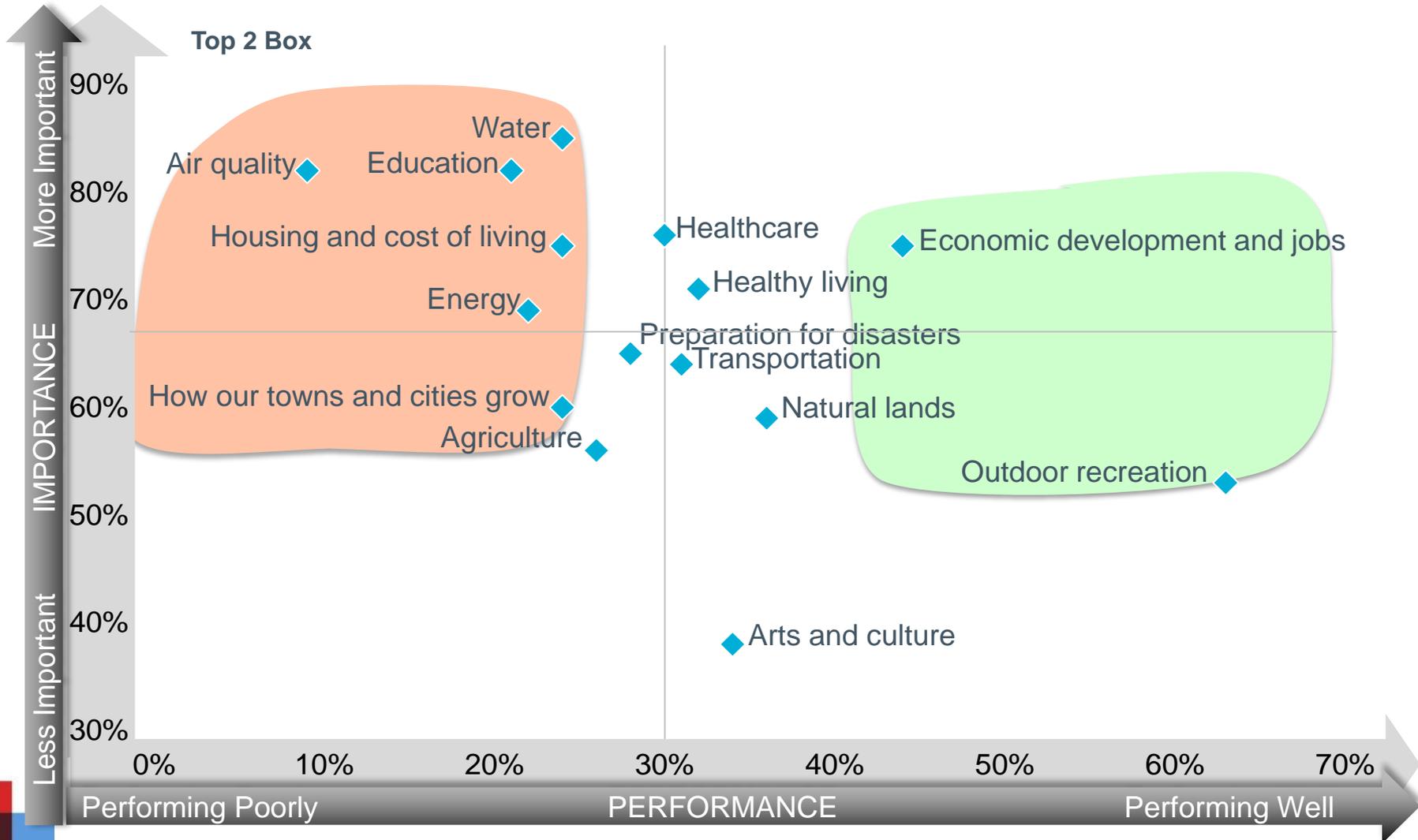
Importance and Performance on State Priorities

State Total



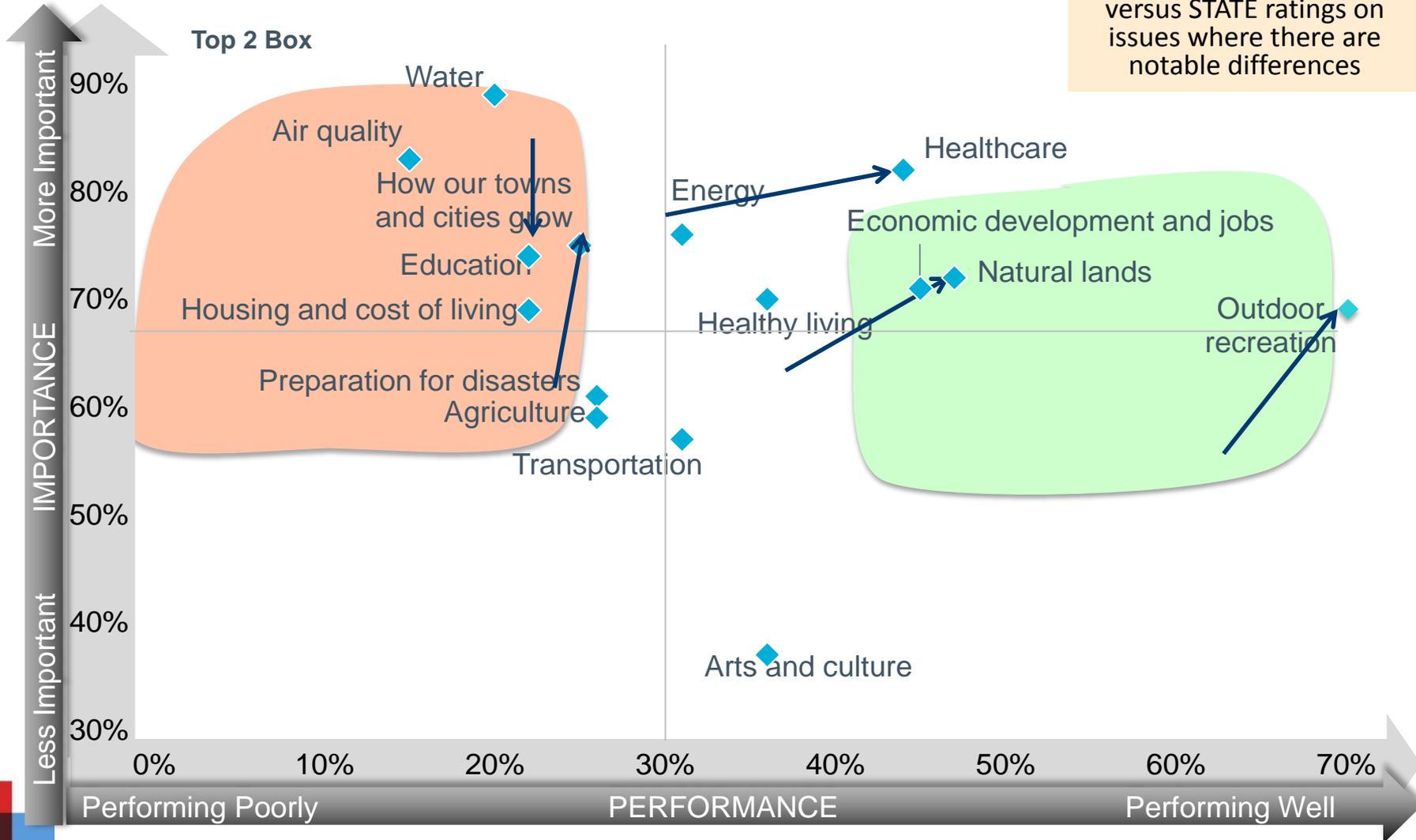
Importance and Performance on State Priorities

Urban



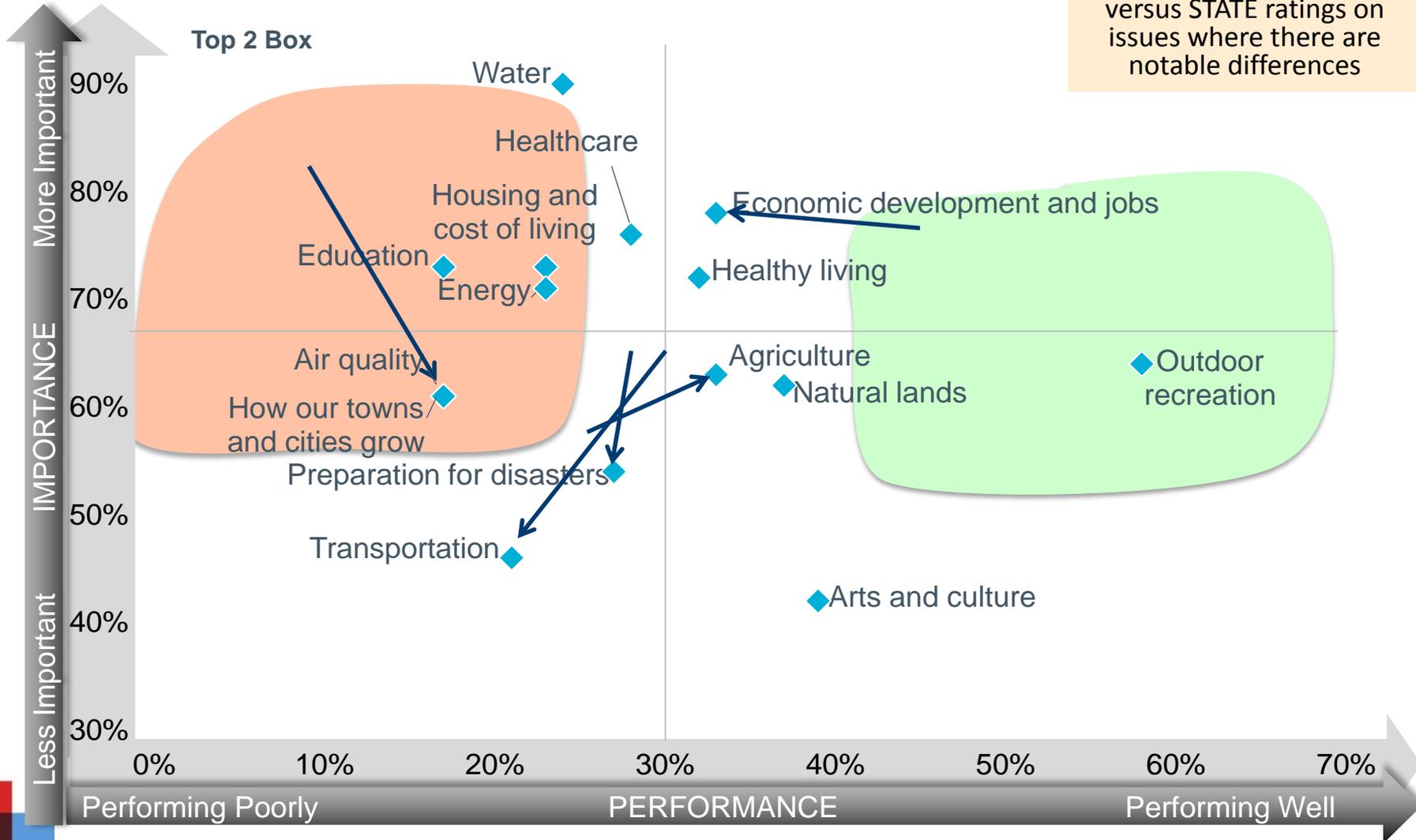
Importance and Performance on State Priorities

Semi-Rural



Importance and Performance on State Priorities

Rural



While residents agree that water, education, healthcare and economic development/jobs are all important to the future of Utah, there are few areas where views diverge. Urban Utahns place more importance on air quality and housing while Rural Utahns are focused more on energy.

Top 2 Box Importance

	Urban	Rural/Semi-Rural
Top 5 Issues	<ol style="list-style-type: none"> 1. Water (85%) 2. Air quality (82%) 3. Education (81%) 4. Healthcare (76%) 5. Economic development and jobs (75%) 5. Housing and cost of living (75%) 	<ol style="list-style-type: none"> 1. Water (89%) 2. Healthcare (78%) 3. Economic development and jobs (76%) 4. Energy (74%) 5. Education (73%)

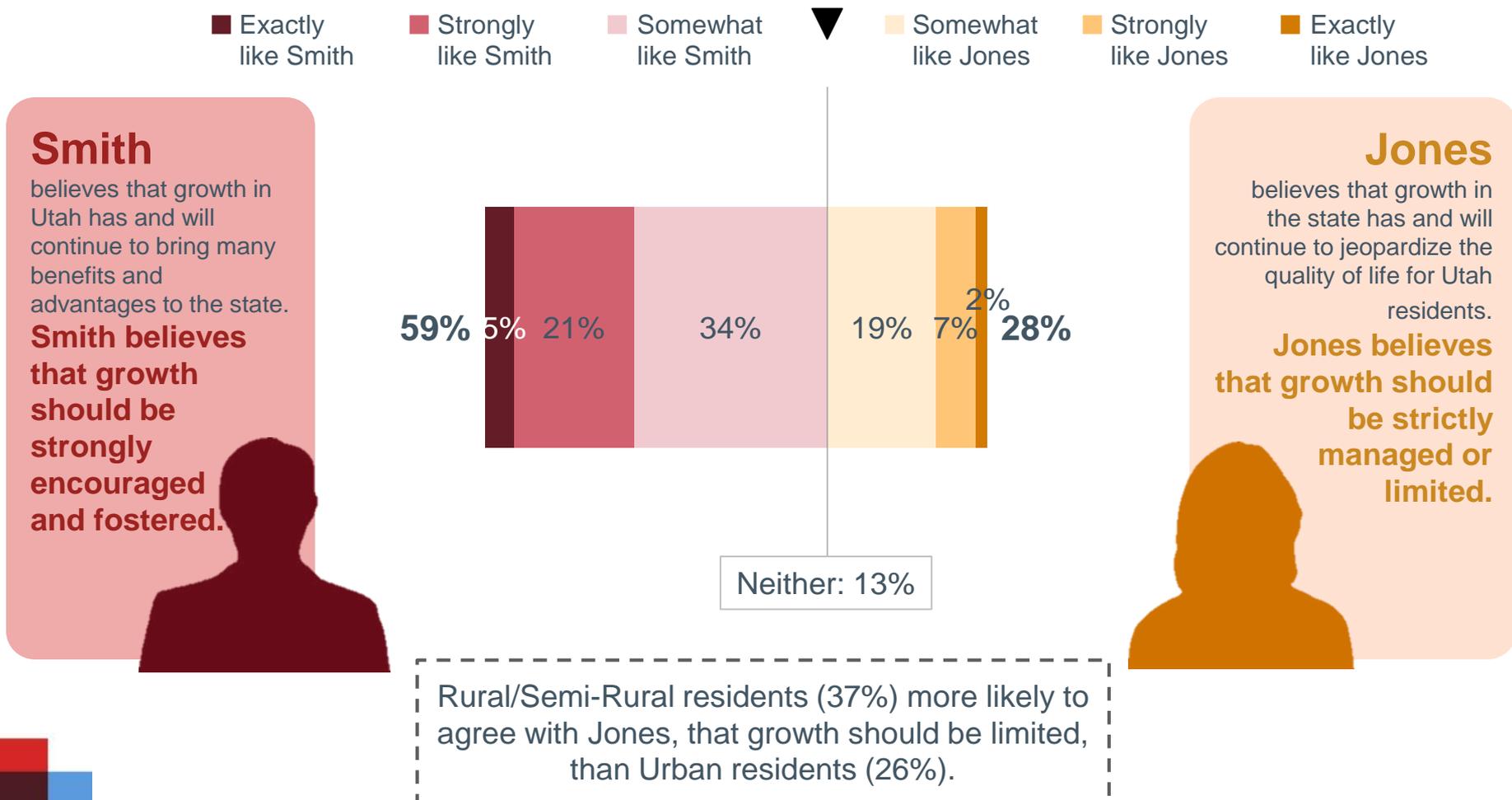
BASE: ALL QUALIFIED RESPONDENTS (Urban N=800, Rural N=200)

Q315. Thinking about the community where you live, please rate each of the following issues where 1 means "not at all important to Utah's future" and 7 means "extremely important to Utah's future."

Detailed Findings

GROWTH

Six in ten Utahns feel positively about growth. Of those with negative feelings, more are Rural residents than Urban.

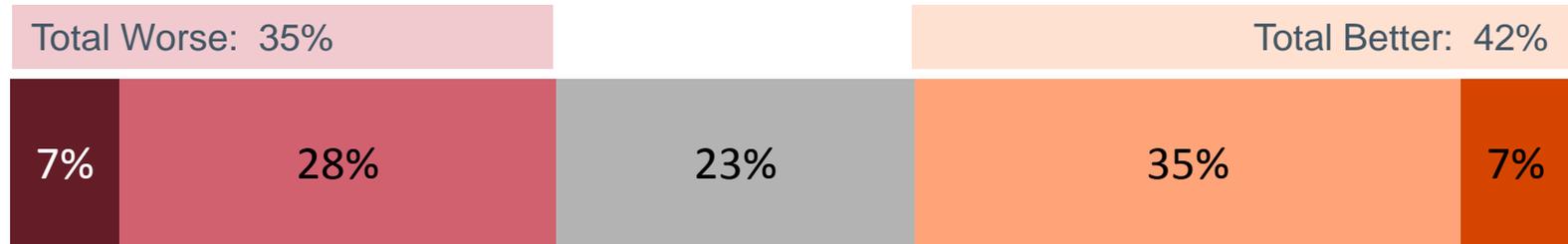


BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q350. Below are the opinions of two hypothetical residents. Please indicate which opinion comes closest to your own. Is your opinion more like Mr. Smith or more like Mr. Jones?

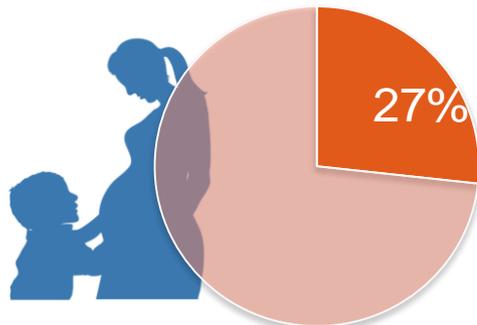
Four in ten Utahns believe future growth in the state will make things better and three quarters connect recent growth to outsiders moving in.

Future Growth in Utah will make things...

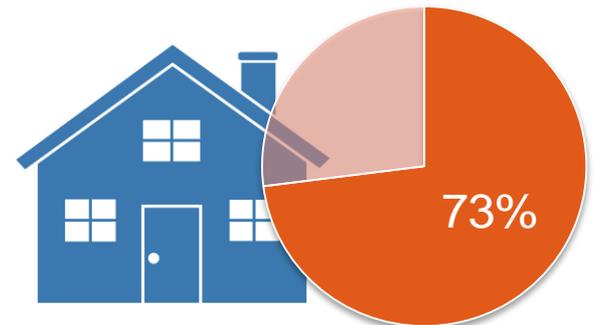


■ A lot worse
 ■ A little worse
 ■ Neither better nor worse
 ■ A little better
 ■ A lot better

Cause of Recent Population Growth



New births within the state



People outside moving in

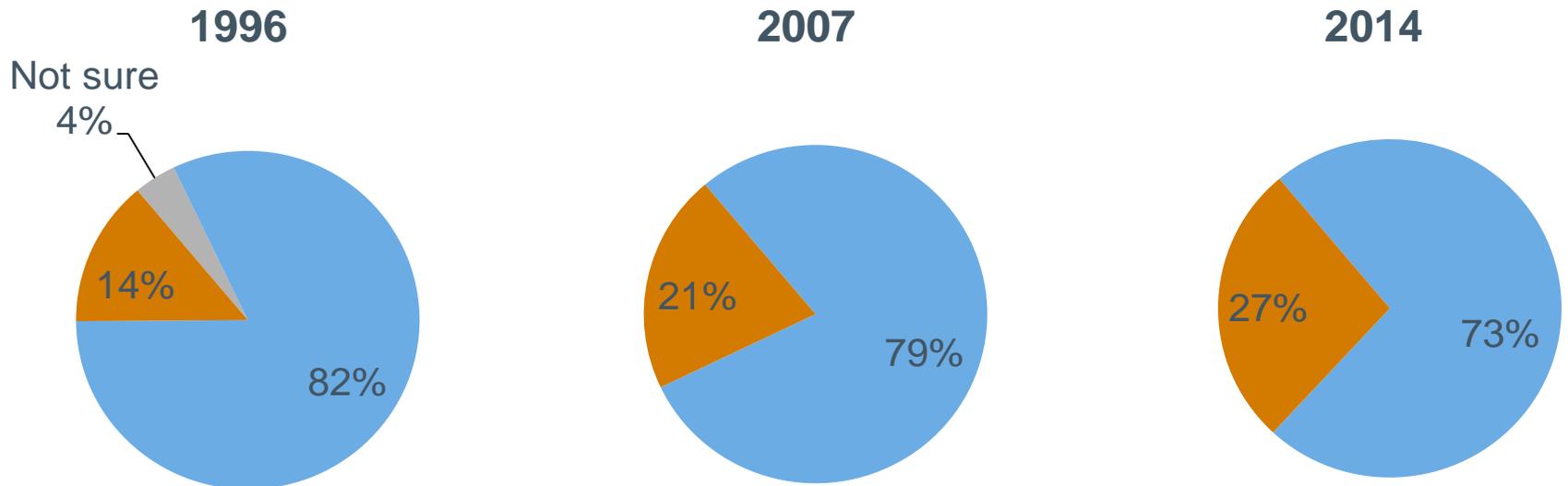
BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q345. Most people see both positive and negative aspects of the changes taking place in the state. Based on your own personal feelings, do you believe future growth in the state of Utah will make things better or make things worse?

Q355. Based on what you have heard or read, which of the following do you think is the primary cause of the recent population growth in Utah?

While the majority of the state still believes the source of new growth is coming from outside Utah, compared to prior years an increasing number are identifying new births as the primary contributor to growth.

Cause of Recent Population Growth



New births within the state

People outside moving in

BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q355 Based on what you have heard or read, which of the following do you think is the primary cause of the recent population growth in Utah?

Utahns increasingly agree that growth should be encouraged, in similar proportion with 1996.

■ Exactly like Smith
 ■ Strongly like Smith
 ■ Somewhat like Smith
 ▼
 ■ Somewhat like Jones
 ■ Strongly like Jones
 ■ Exactly like Jones

Smith

believes that growth in Utah has and will continue to bring many benefits and advantages to the state.

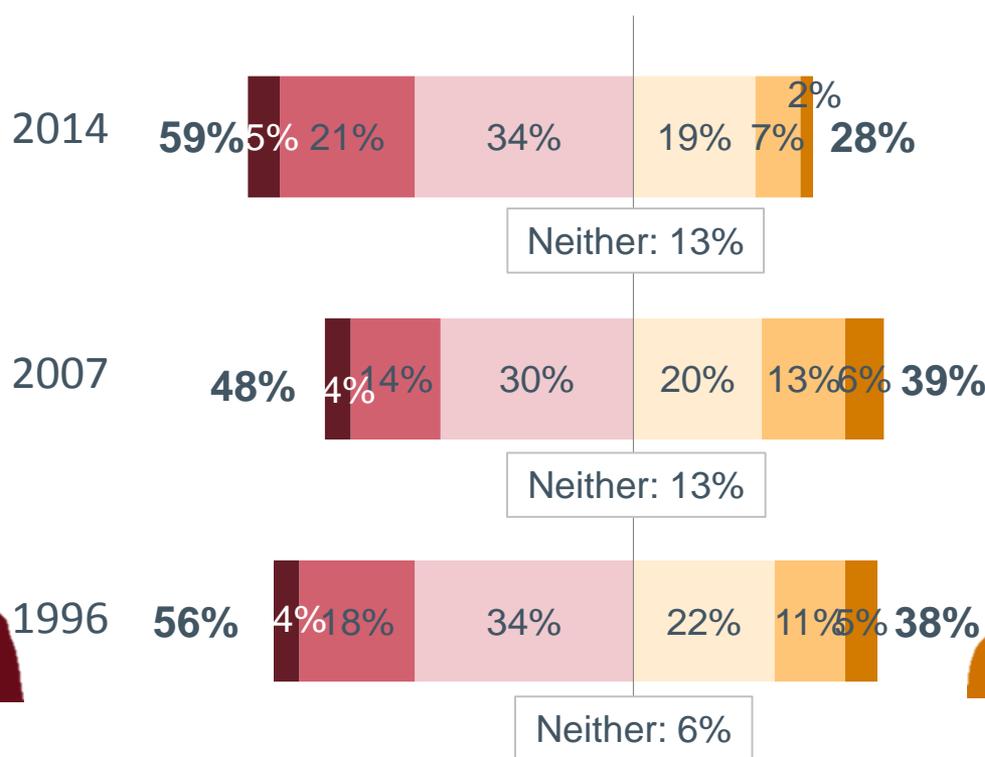
Smith believes that growth should be strongly encouraged and fostered.



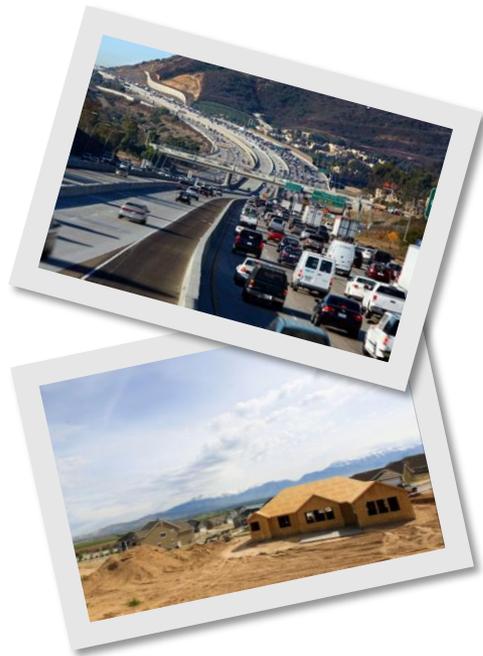
Jones

believes that growth in the state has and will continue to jeopardize the quality of life for Utah residents.

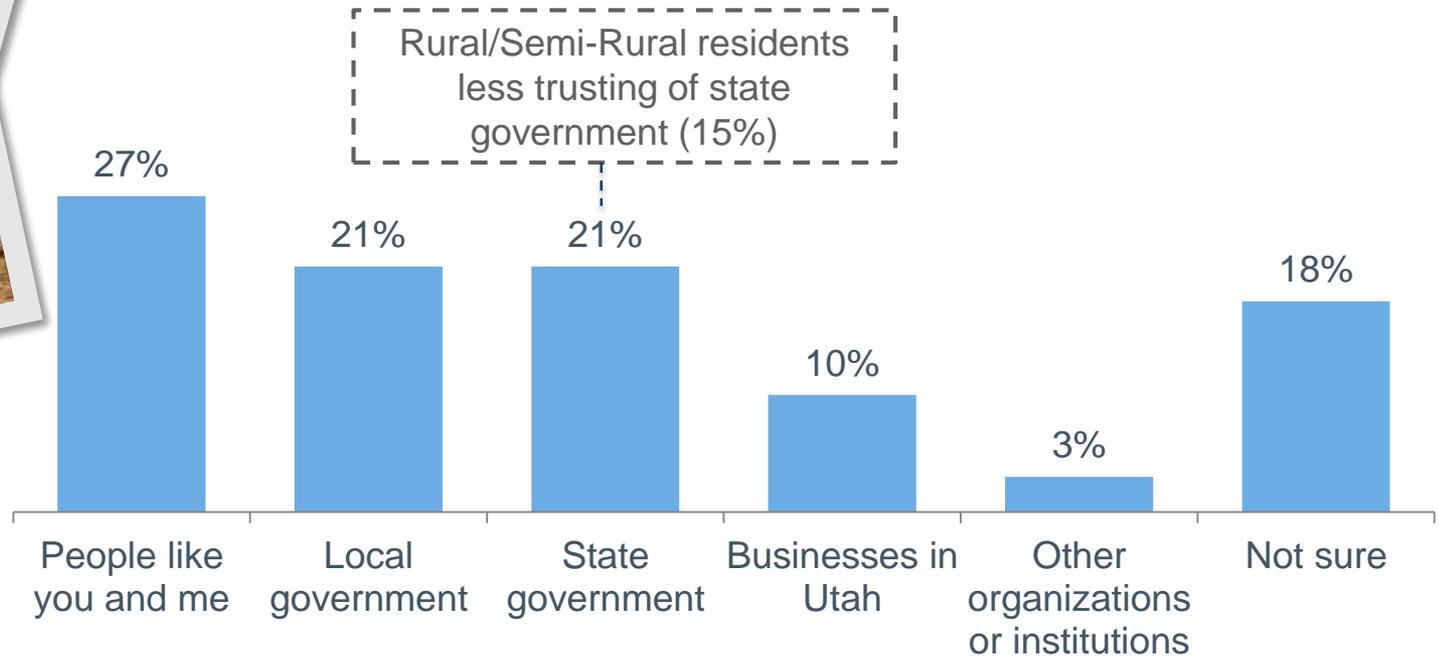
Jones believes that growth should be strictly managed or limited.



Residents in Utah feel that “people like you and me” can best deal with growth issues, while about one in four feel that the local or state government is better equipped. However, Rural residents are less trusting of state government than Urban residents.



Who can best deal with growth issues?

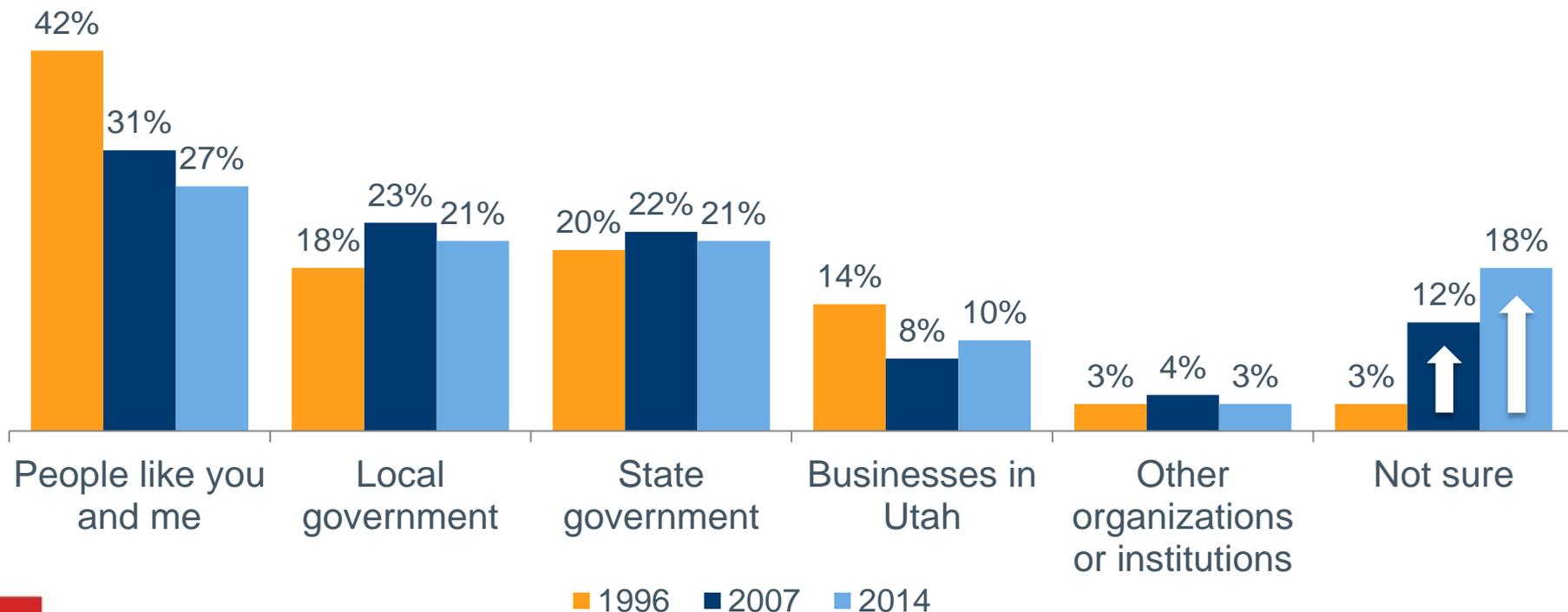


BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q360. In your opinion, who can best deal with growth issues in a way that will have the most positive impact on Utah residents?

Utahns are increasingly unsure of who can best deal with growth issues and less confident in “people like you and me.”

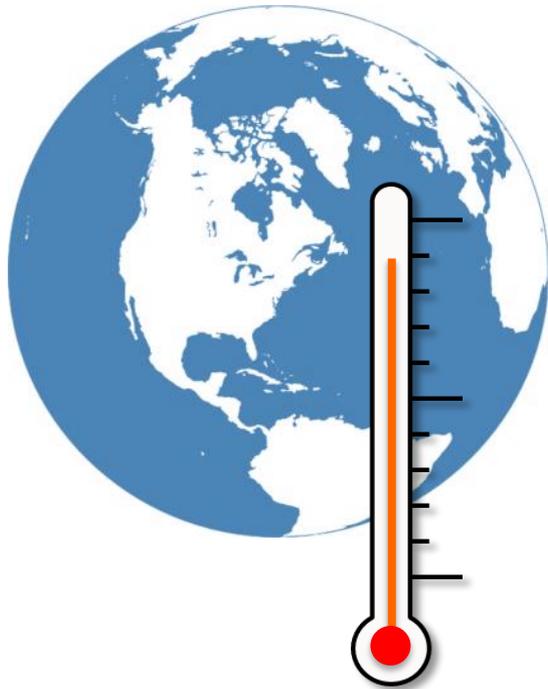
Who can best deal with growth issues?



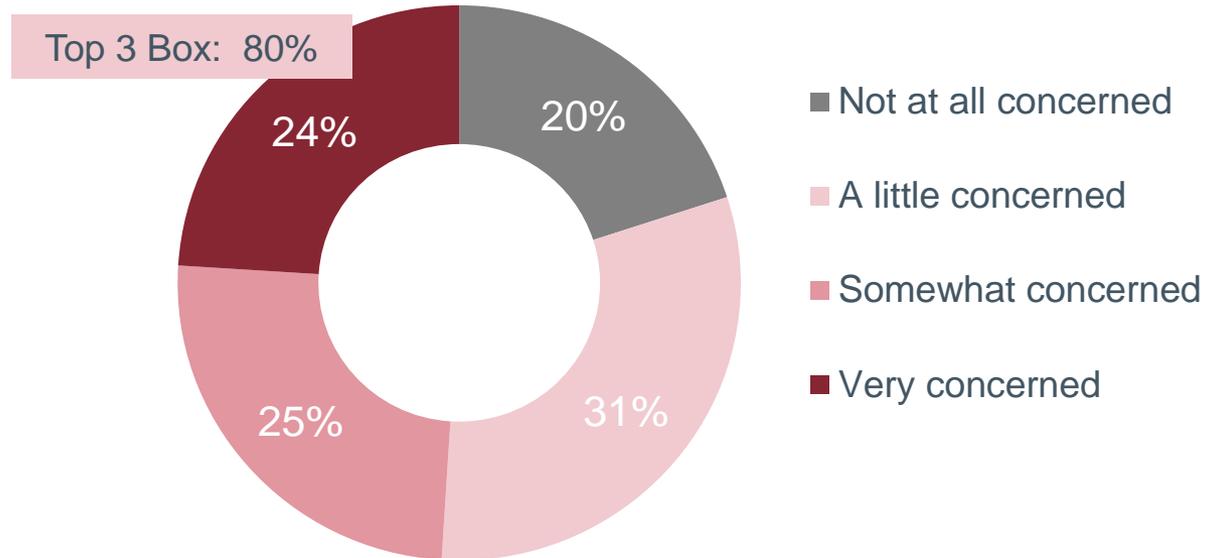
BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q360. In your opinion, who can best deal with growth issues in a way that will have the most positive impact on Utah residents?

Four out of five Utahns have some level of concern about global warming.



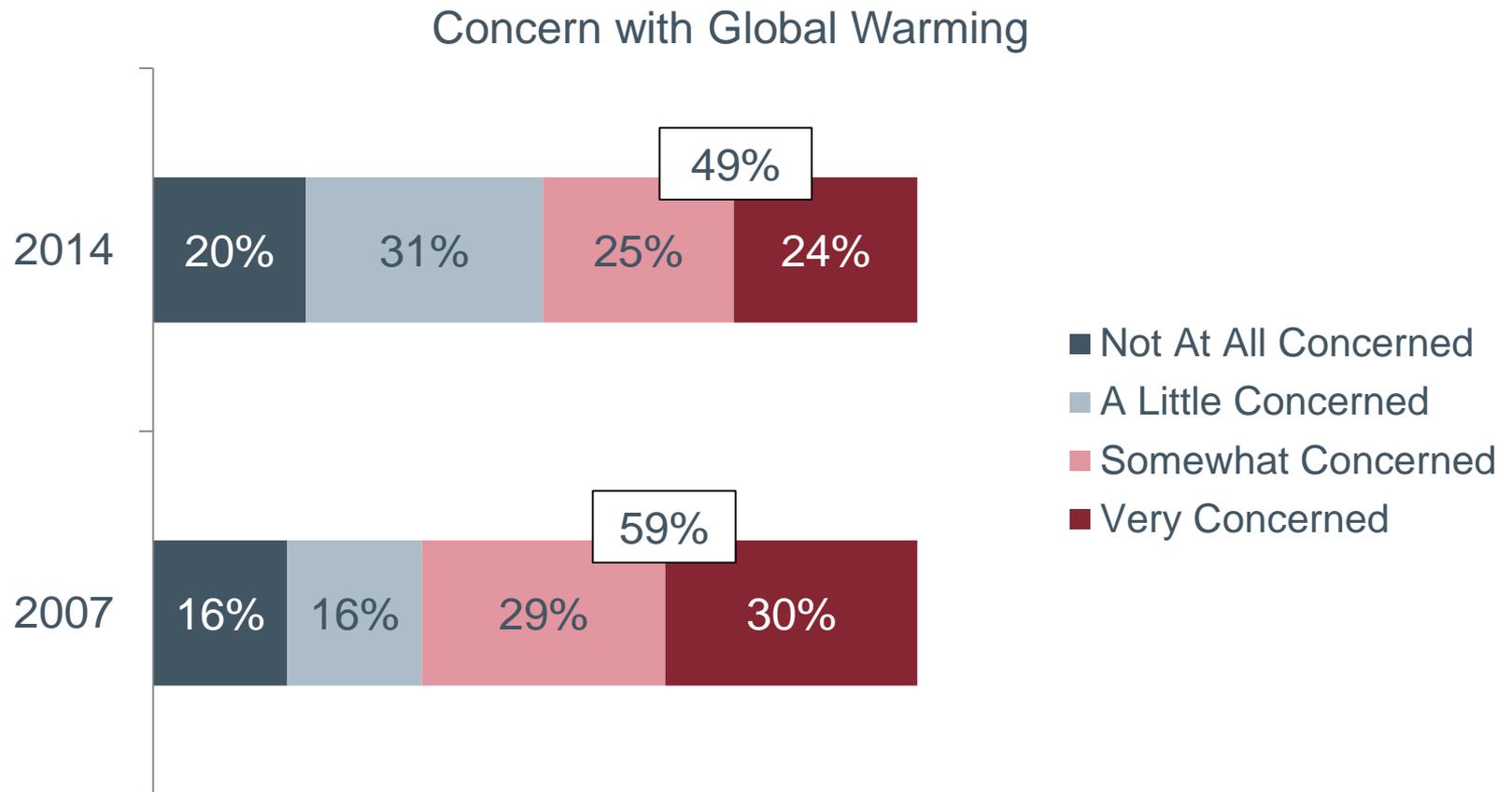
Concern with Global Warming



BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q365. How concerned are you with the long-term effects of global warming or global climate change?

Utahns are less concerned with global warming now than seven years ago.



BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q365. How concerned are you with the long-term effects of global warming or global climate change?

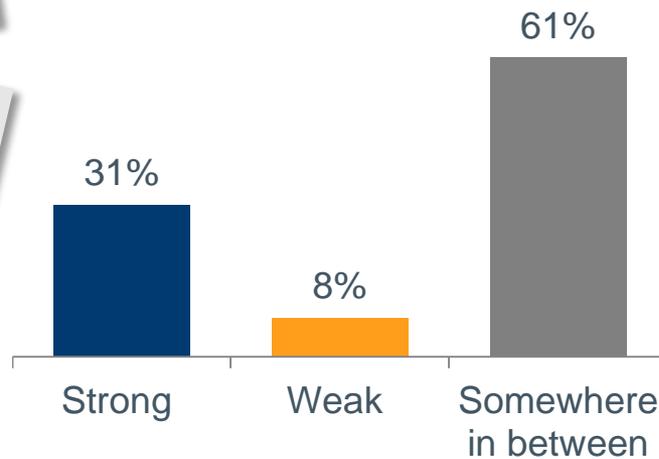
Detailed Findings

ATTITUDES ON ECONOMIC DEVELOPMENT

Most residents feel that Utah's local economy lies "somewhere in between" being strong and weak, but a majority believe that it is improving. Urban residents are more likely than rural residents to categorize the economy as strong and improving.

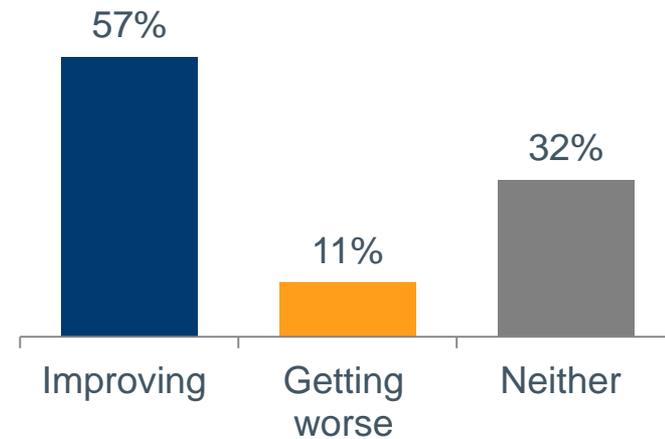


Strength of Local Economy



Urban residents indicate a stronger local economy than Rural/Semi-Rural residents.

Direction of Local Economy



Urban residents indicate an improving local economy more than Rural/Semi-Rural Residents.

BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q600. Based on what you are seeing and hearing from others in the community, would you say the local economy is strong, weak, or somewhere in between?

Q605. Do you think your local economy is improving or getting worse?

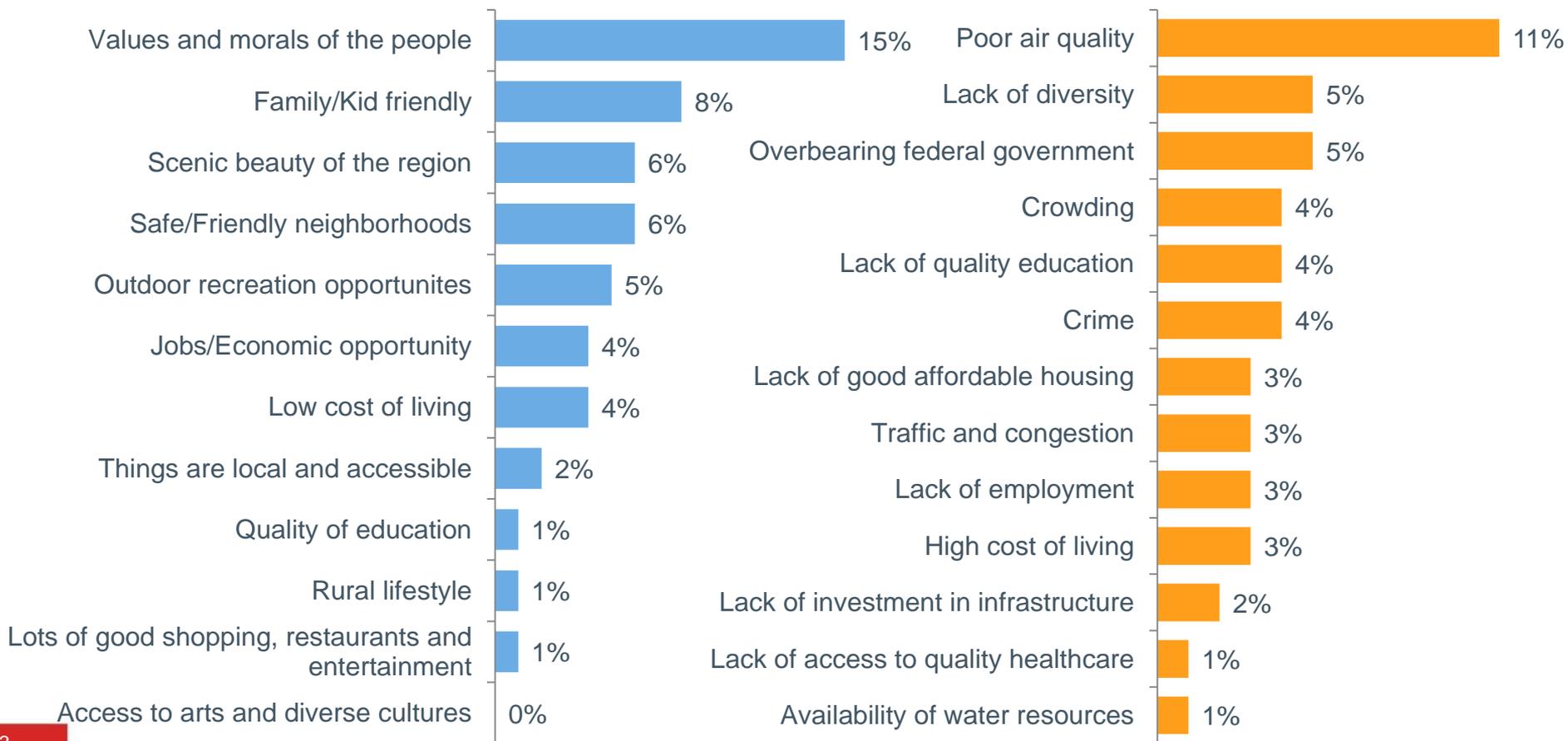
Detailed Findings

UTAHN VALUES: QUALITY OF LIFE

Quality of Life *Personal* Priorities

Positives (52%)

Negatives (48%)

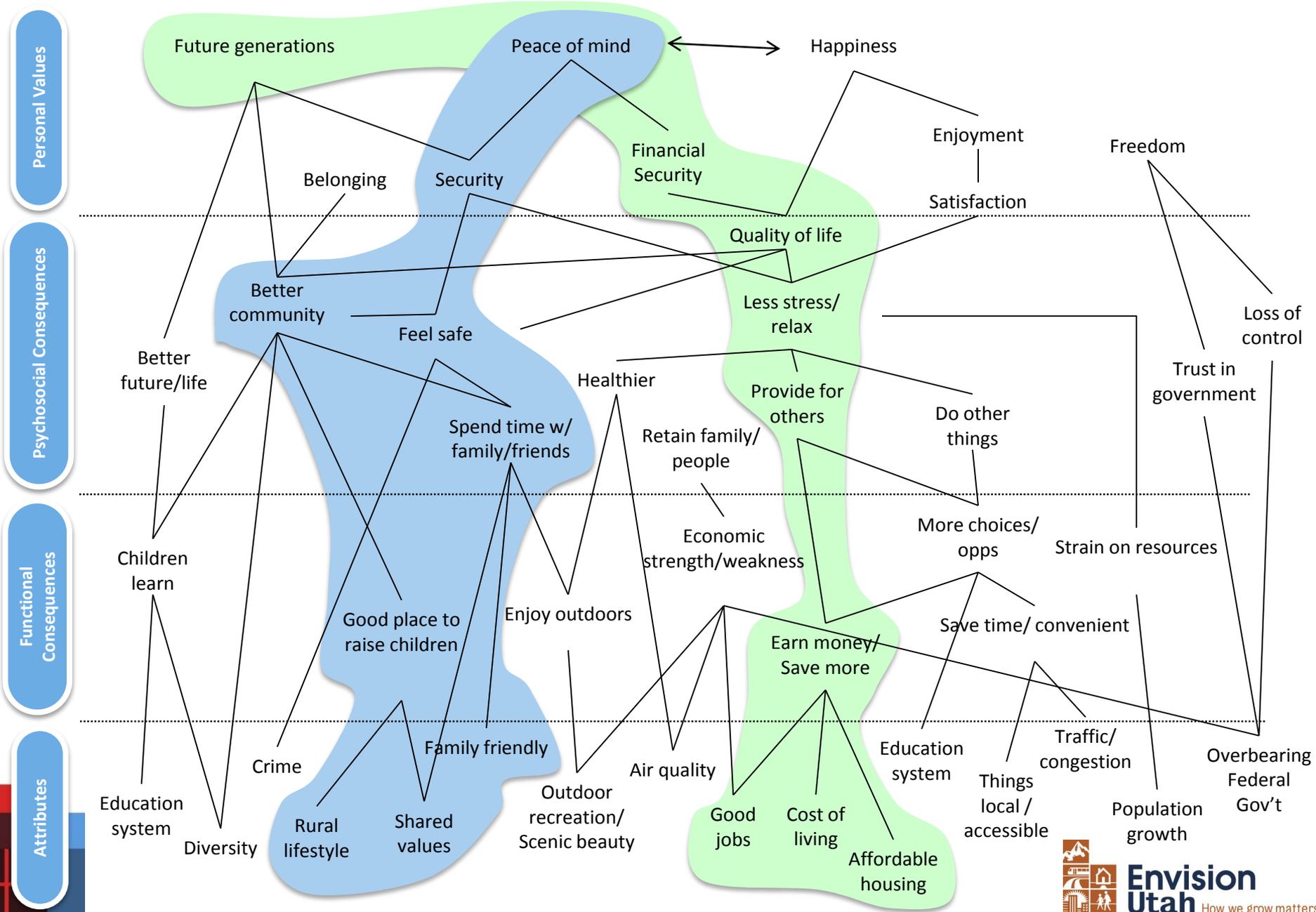


BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q400. The people of Utah have mentioned many factors – both positive and negative – that contribute to or detract from their quality of life. Thinking about the quality of life in Utah, please identify which one of the following factors has the most significant impact on the overall quality of life for you personally. Take your time and be sure to select the one (positive or negative) that has the most significant impact on you personally.

2014 Quality of Life Master Map

■ Dominant Pathway
■ Secondary Pathway



Personal Values

Psychosocial Consequences

Functional Consequences

Attributes

Safe Secure Environment

Total: 30%

Residents Want Friendly Neighbors with Similar Values. This Creates a Safe Environment to Raise Children and an overall Sense of Community, Promoting Peace and Personal Security.

Peace of Mind / Personal Security

Feel Safe / Better Community

Good Place to Raise Children / Spend Time With Family & Friends

People/Family Friendly Shared Values

Rural: 27%
Rural ladder is heavily driven by shared values (13%) and rural lifestyle (8%).

Cost of Living / Economic Opportunity

The availability of good paying Jobs coupled with a Low Cost of Living generates More Income to Buy More and Do More. Residents can Provide for their families, ensuring that they can Remain in Utah. This gives a sense of Financial Security while making things better for Future Generations.

Jobs / Economic Opportunity
Cost of Living

Earn More / Save Money

Provide / Buy More /
Do More / Better Life

Financial Security /
Future Generations

Total: 17%

Rural: 15%

Rural ladder is heavily driven by perceptions of high cost of living (6%).

Scenic Beauty / Outdoor Recreation

The Scenic Beauty of the region and Outdoor Recreational options provide abundant opportunities for and quality Time to enjoy with Friends and Family. Being active Outdoors helps to promote Healthier Living, Personal Enjoyment and Happiness.

Total: 11%

**Happiness/
Personal Enjoyment**

**Live Healthier/
Better Life**

**Enjoy Outdoors /
Spend Time With Family
& Friends**

**Outdoor Recreation /
Scenic Beauty**

Rural: 12%

Rural ladder is heavily driven by scenic beauty of the region (8%).

Air Quality

Poor Air Quality is just not Healthy for me or my family. It leads to illness, Stress and lack of Security for Future Generations.

Total: 11%

**(Lack of) Security /
Future Generations**

**Stress / Worry
People/Family leaving**

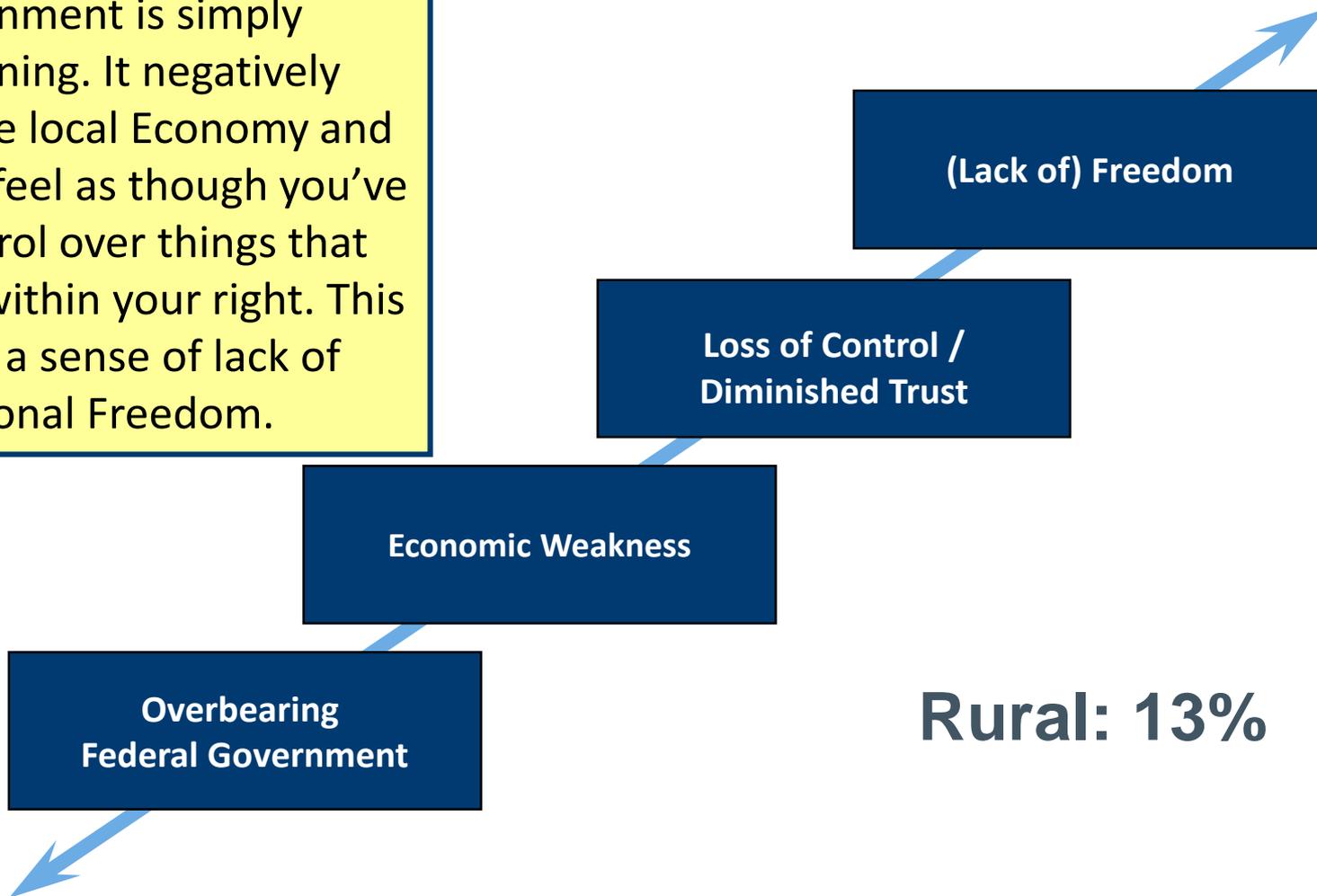
**Illness /
Lack of Healthy Living**

Poor Air Quality

Rural: 8%

Overbearing Federal Government: Rural

An Overbearing Federal Government is simply constraining. It negatively impacts the local Economy and makes you feel as though you've Lost Control over things that should be within your right. This leads to a sense of lack of personal Freedom.



Rural: 13%

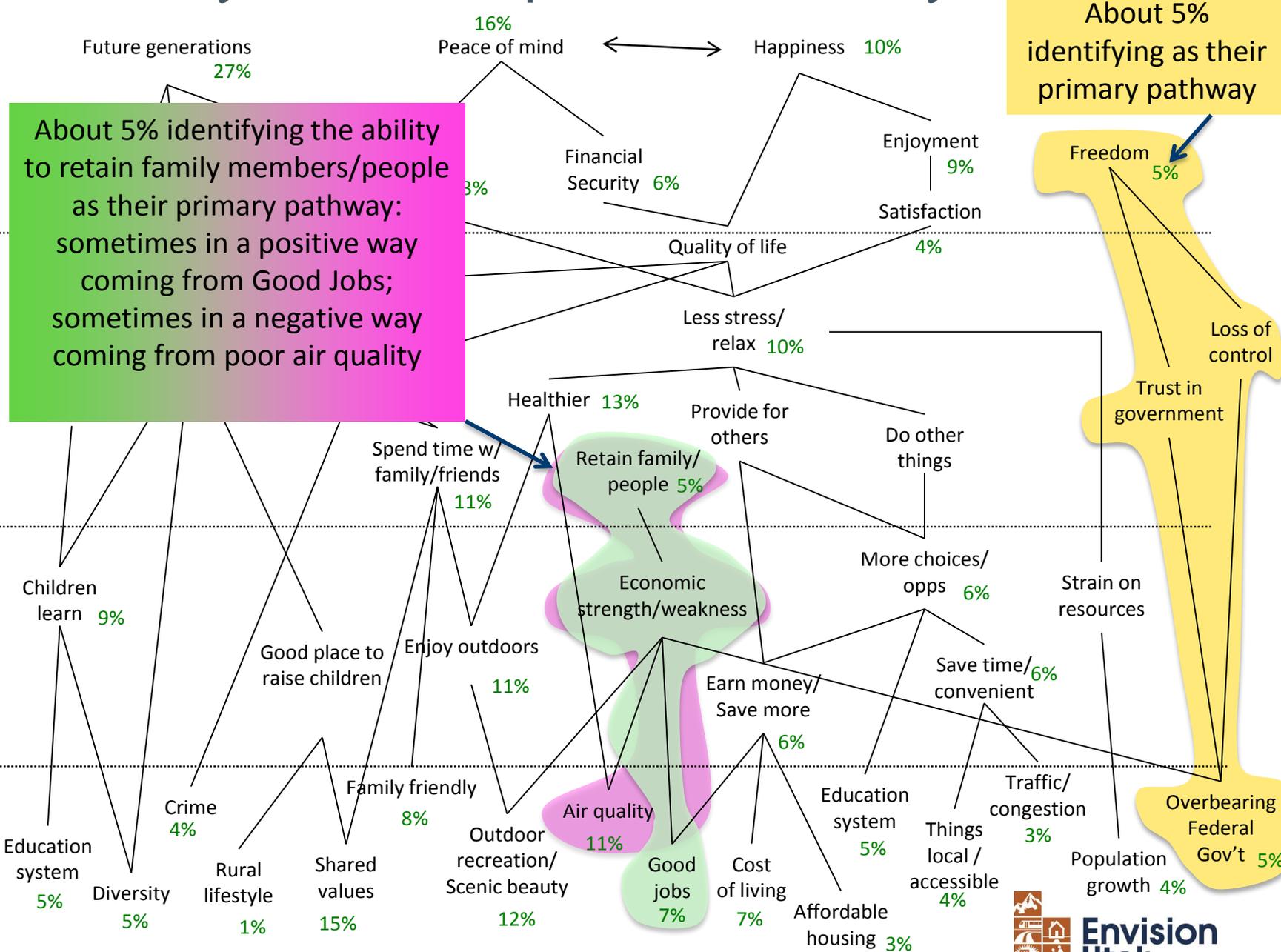
2014 Quality of Life Map: New Pathways

Personal Values

Psychosocial Consequences

Functional Consequences

Attributes



About 5% identifying the ability to retain family members/people as their primary pathway: sometimes in a positive way coming from Good Jobs; sometimes in a negative way coming from poor air quality

About 5% identifying as their primary pathway

2014 Quality of Life Master Map: Rural Residents

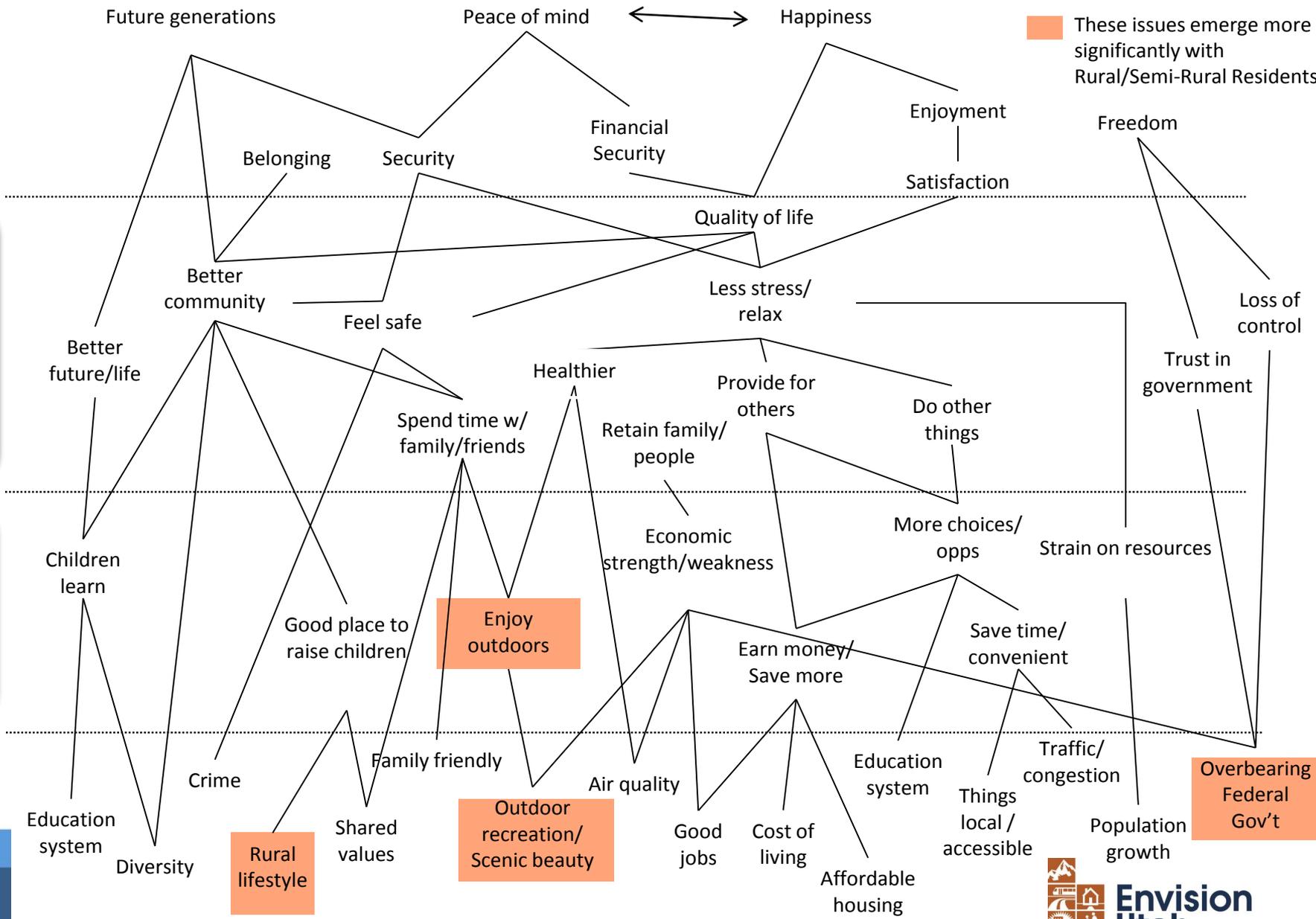
Personal Values

Psychosocial Consequences

Functional Consequences

Attributes

These issues emerge more significantly with Rural/Semi-Rural Residents

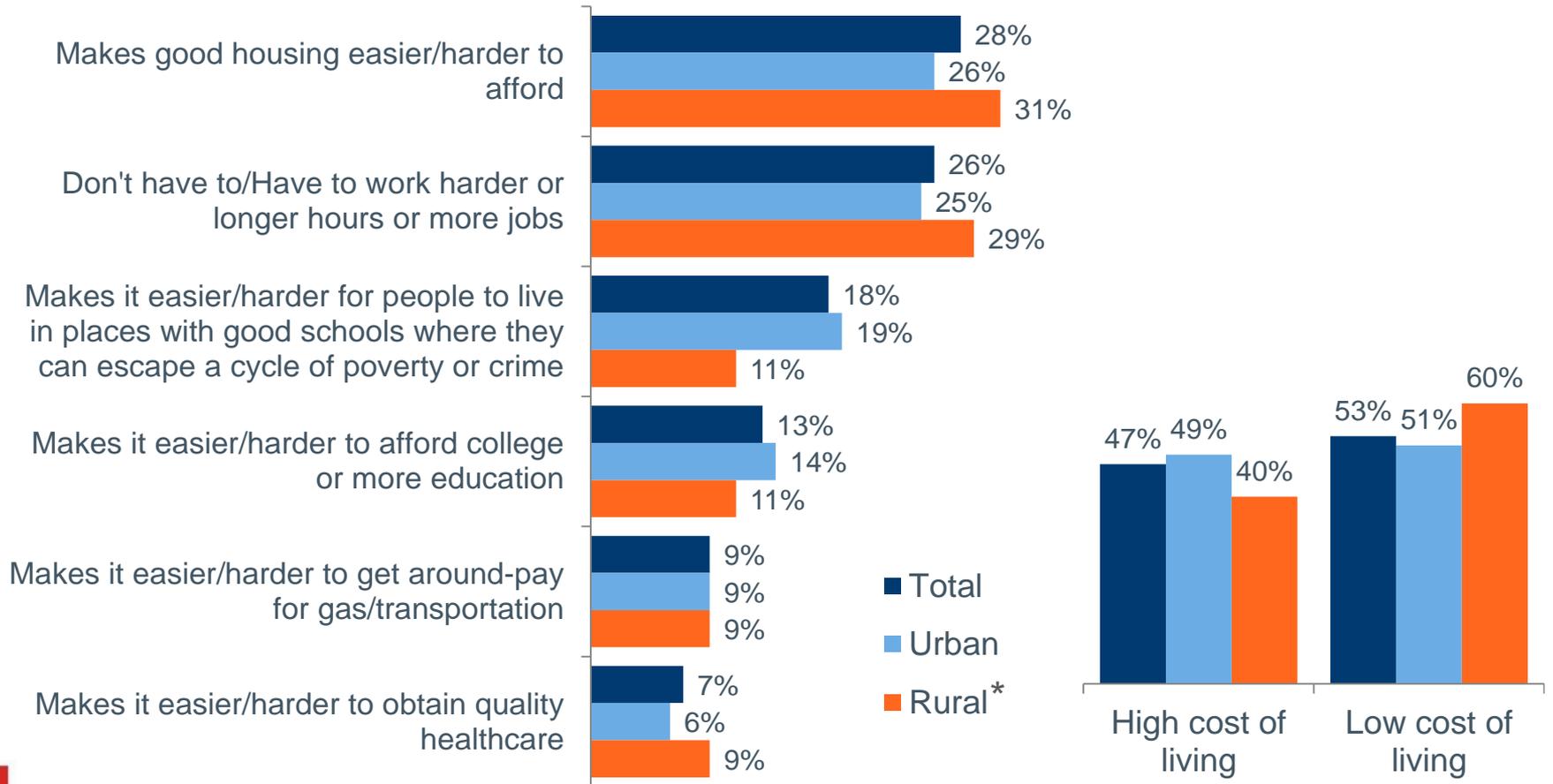


Detailed Findings

UTAHN VALUES: SPECIAL ISSUES

Perspectives on cost of living are split between those who view it as too high and those who feel it's low. Rural Utahns are more likely to indicate a low cost of living than Urban Utahns, but both can agree that it directly impacts affordability of housing and how hard they work.

Cost of Living



* Note: Extremely small base size. Results should be viewed as directional. Rural is comprised of Semi-Rural and Rural residents.

BASE: ALL QUALIFIED RESPONDENTS (N=166)

Q500. The cost of living can impact life in Utah in many different ways. To start out, which of the following best describes the cost of living where you live?

Q501. When it comes to impacts of the high cost of living, which of the following do you feel has the biggest impact on you and your family personally?

Q503. When it comes to impacts of the low cost of living, which of the following do you feel has the biggest impact on you and your family personally?

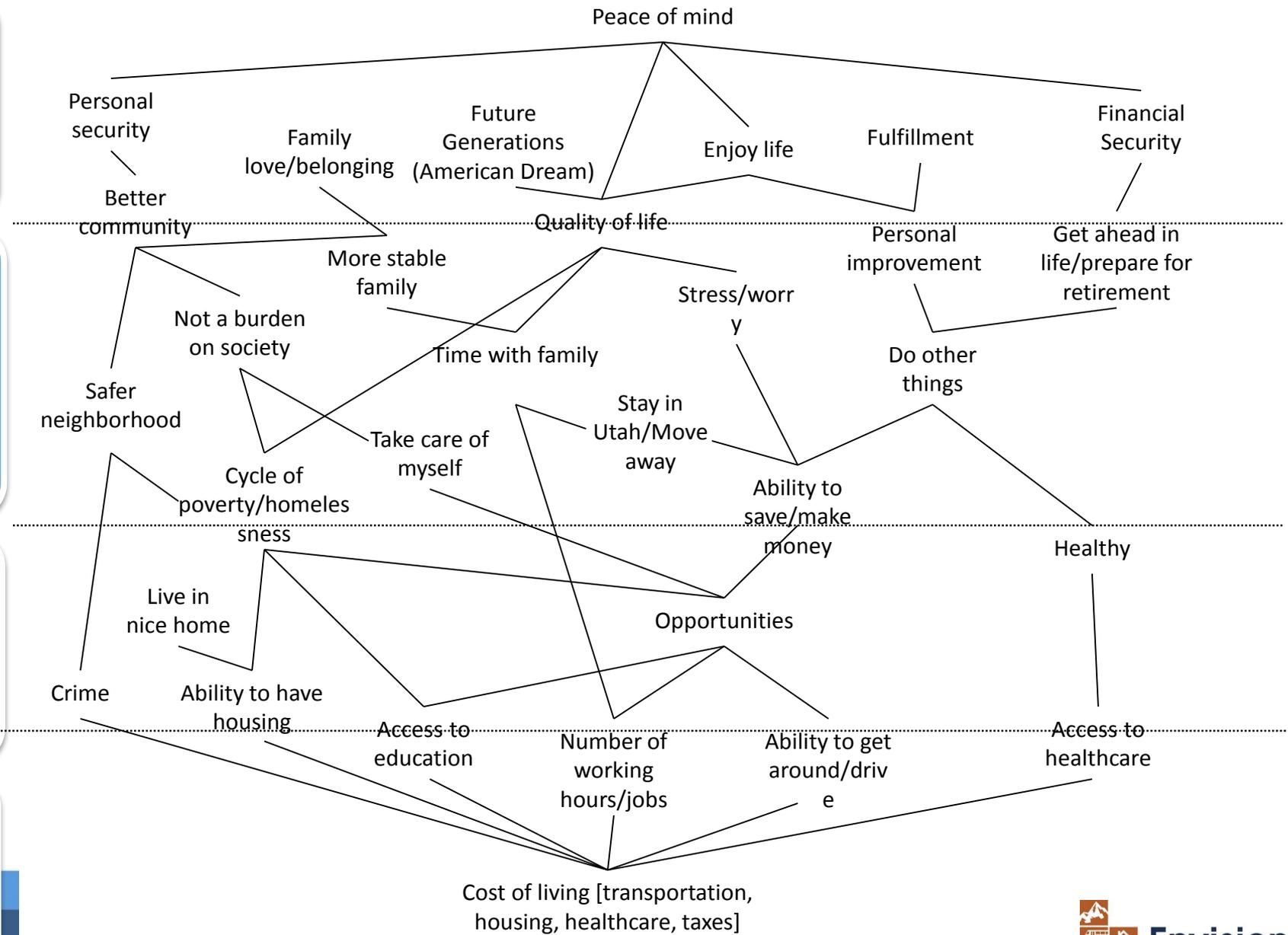
Cost of Living: Map

Personal Values

Psychosocial Consequences

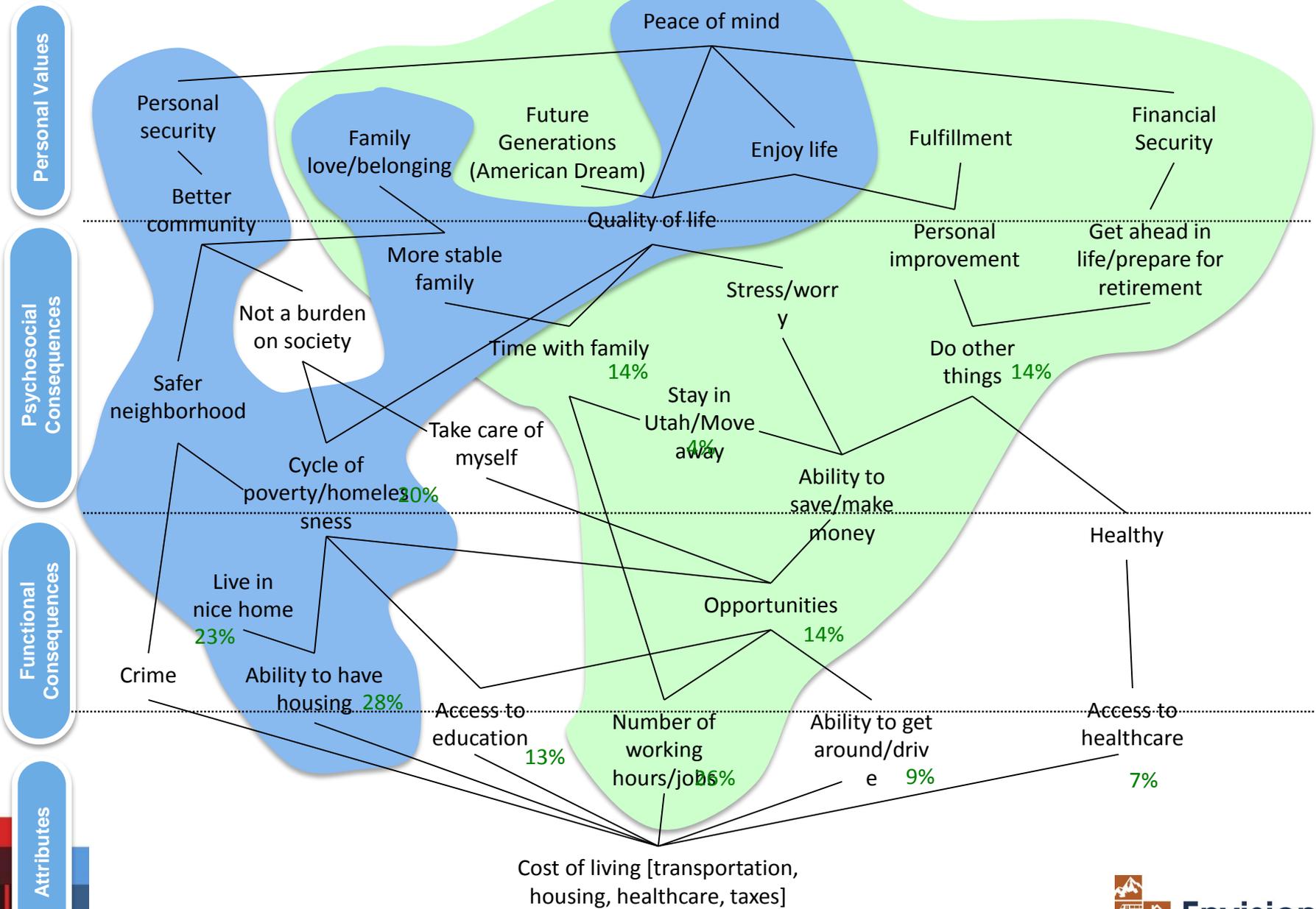
Functional Consequences

Attributes



Cost of Living: Pathways

■ Dominant Pathway
■ Secondary Pathway



Cost of Living: Rural Distinction

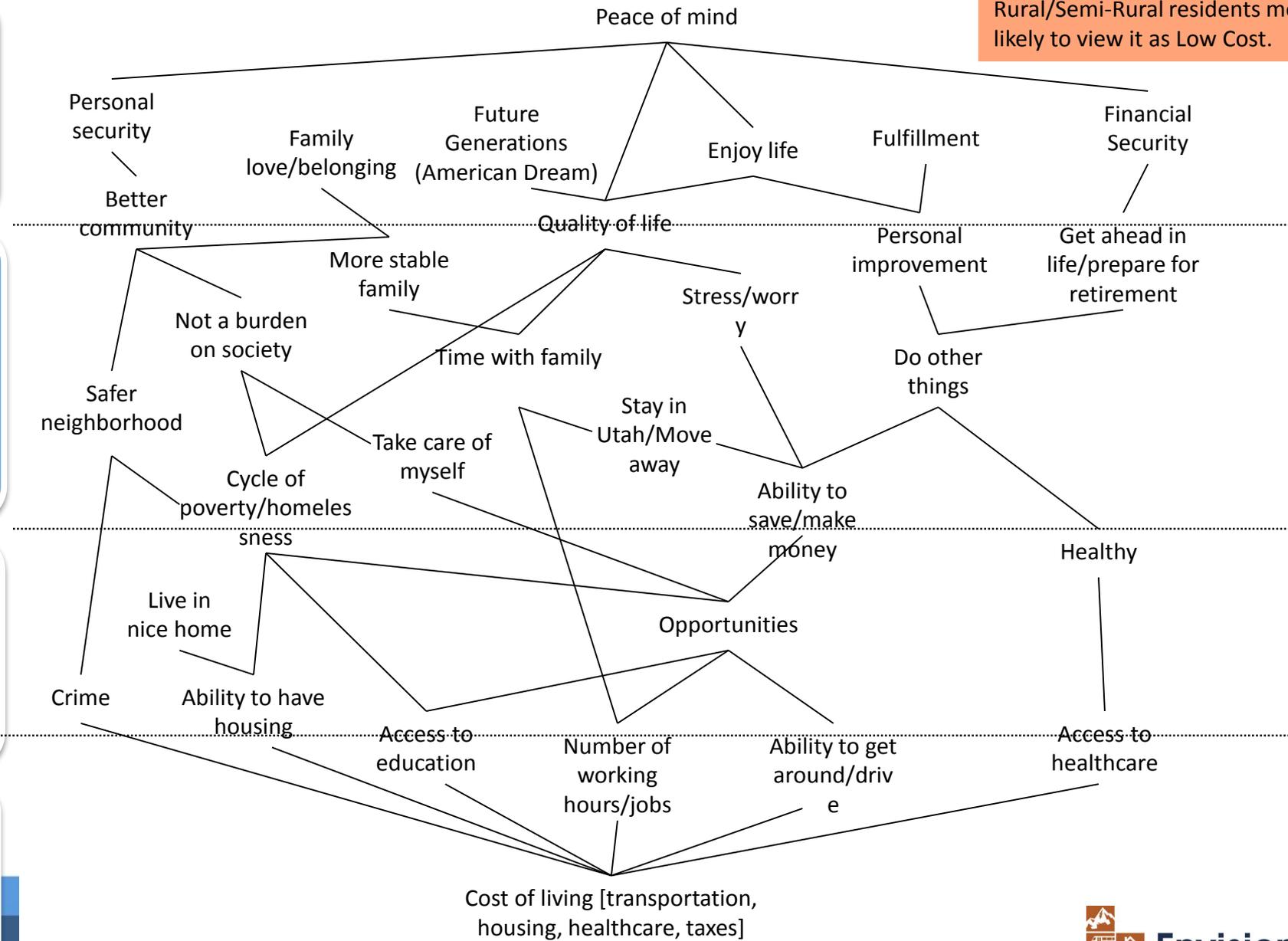
No notable differences between Rural/Semi-Rural and Urban other than view on Cost of Living where Rural/Semi-Rural residents more likely to view it as Low Cost.

Personal Values

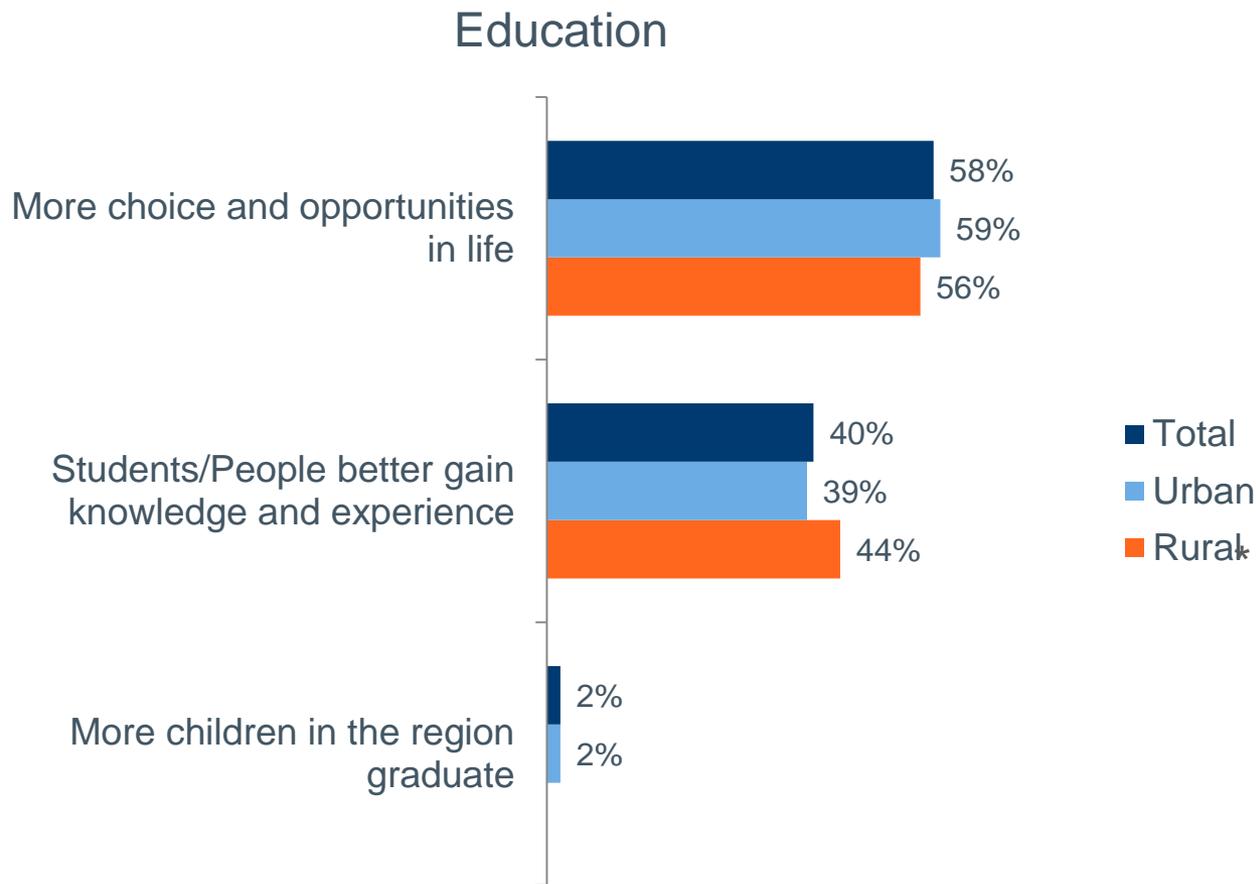
Psychosocial Consequences

Functional Consequences

Attributes



Utahns are most impacted by the choices and opportunities improved education offers them.



* Note: Extremely small base size. Results should be viewed as directional. Rural is comprised of Semi-Rural and Rural residents.

BASE: ALL QUALIFIED RESPONDENTS (N=167)

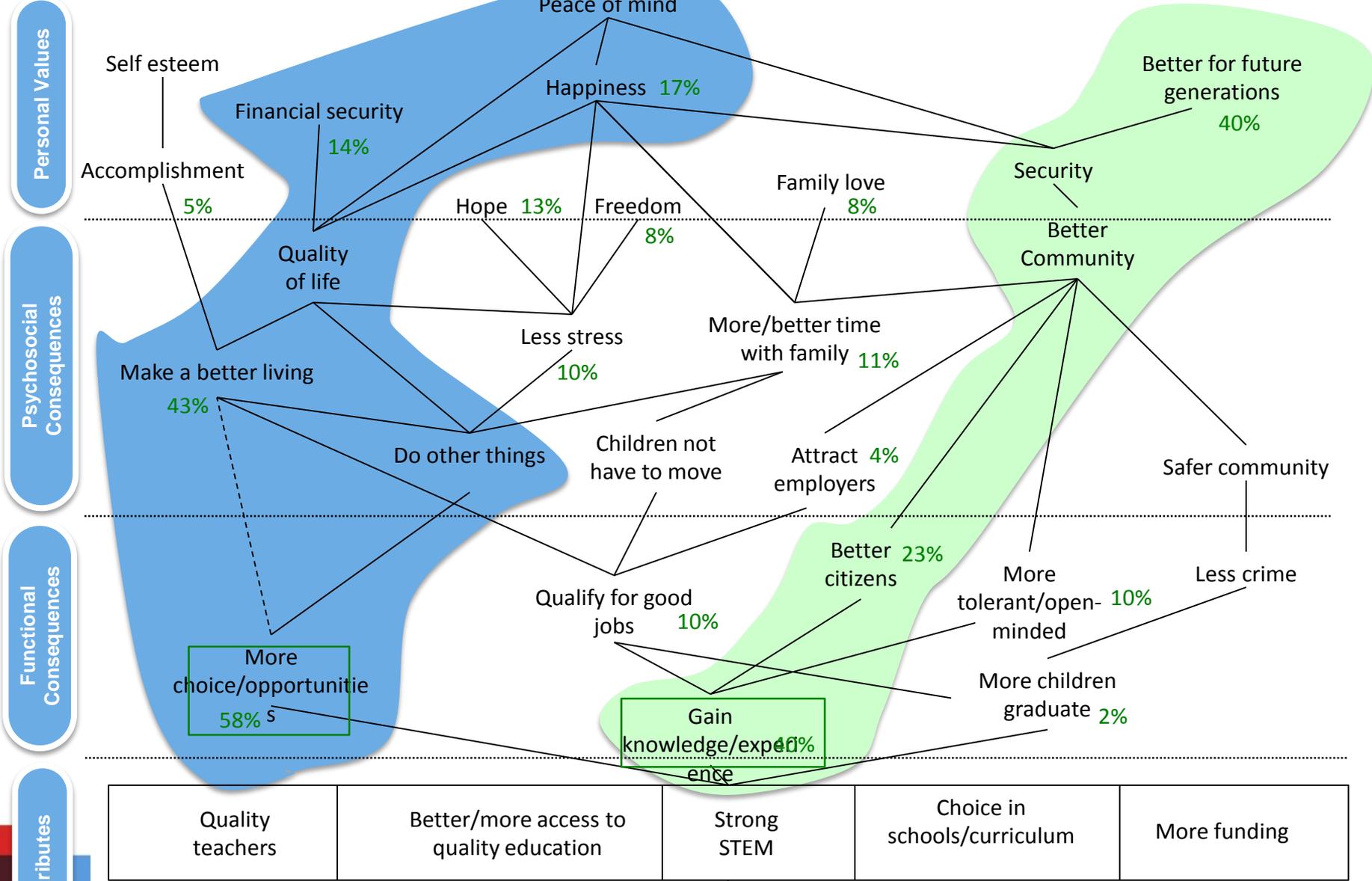
Q505. When it comes to improving education, which of the following do you feel has the biggest impact on you and your family personally?

Education System: Pathways

Mostly Good Job

Dominant Pathway

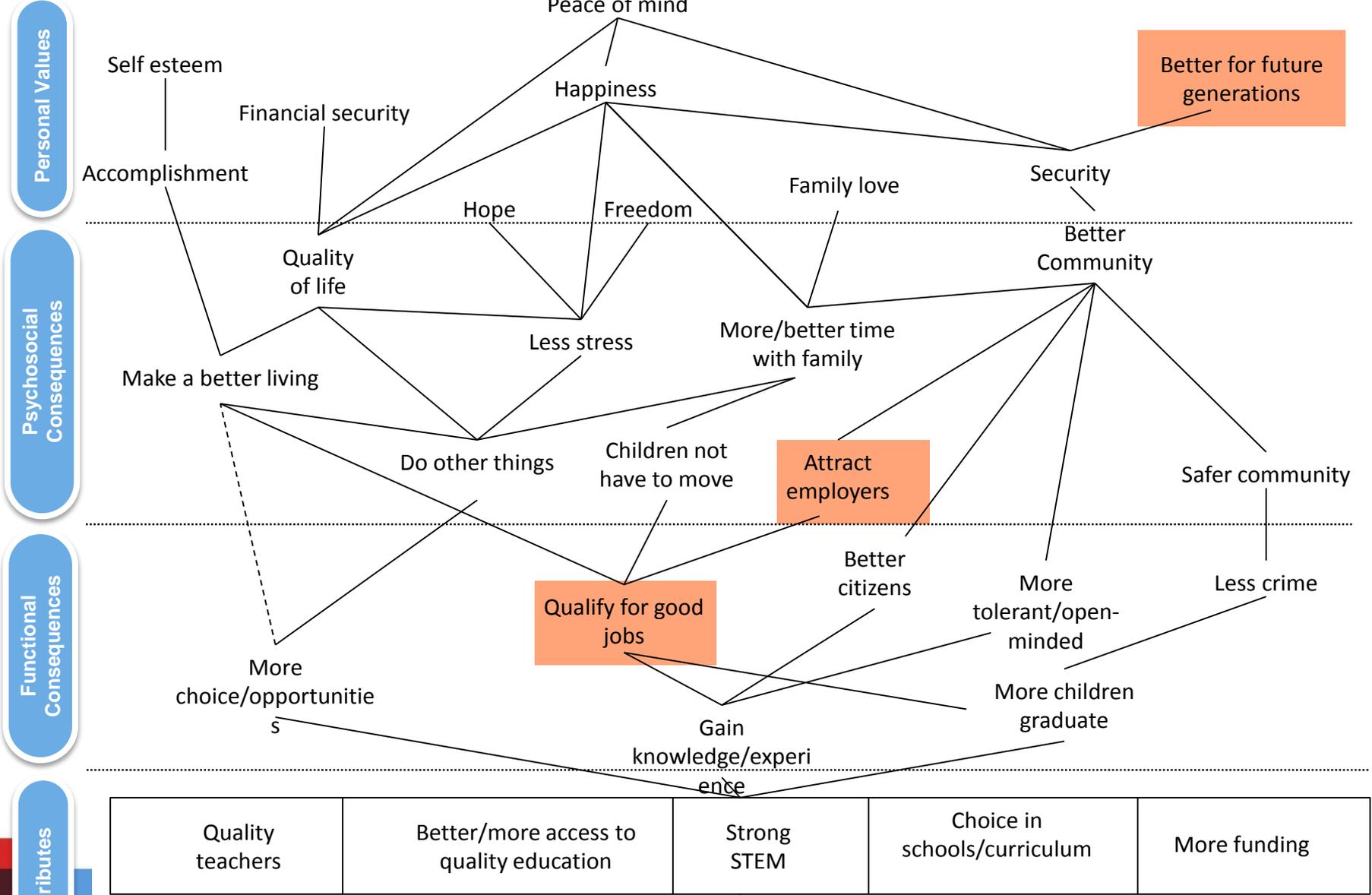
Secondary Pathway



Education strategies

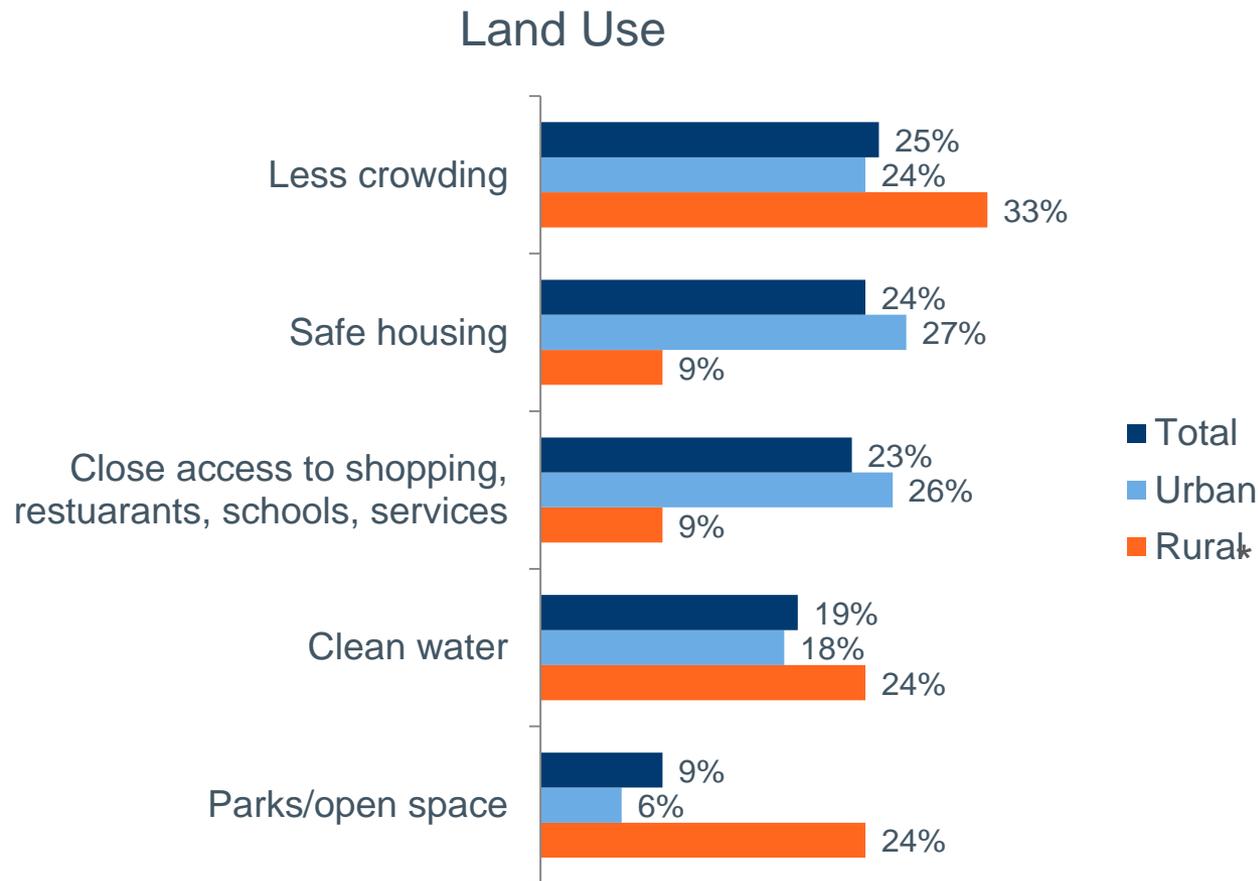
Education System: Rural Distinction

More Important to Rural/Semi-Rural Residents



Education strategies

Rural Utahns are most impacted by less crowding when considering how towns and cities grow. Urban Utahns feel the impact of safe housing and close access to shopping, restaurants, schools, services more.



* Note: Extremely small base size. Results should be viewed as directional. Rural is comprised of Semi-Rural and Rural residents.

BASE: ALL QUALIFIED RESPONDENTS (N=167)

Q515. When it comes to how towns and cities grow, which of the following do you feel has the biggest impact on you and your family personally?

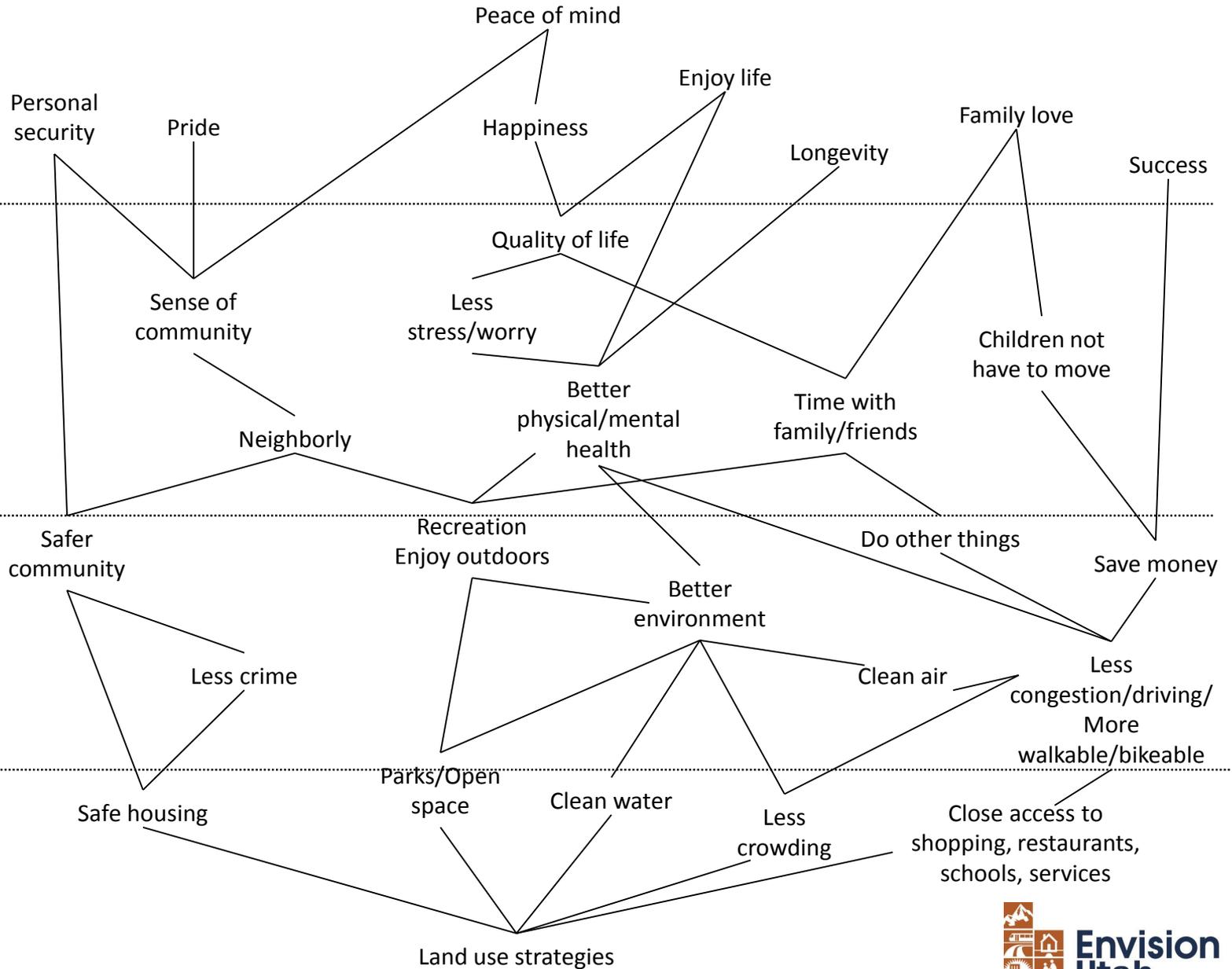
Land Use: How Towns/Cities Grow: Map

Personal Values

Psychosocial Consequences

Functional Consequences

Attributes



Land Use: How Towns/Cities Grow: Pathways

■ Dominant Pathway
■ Secondary Pathway

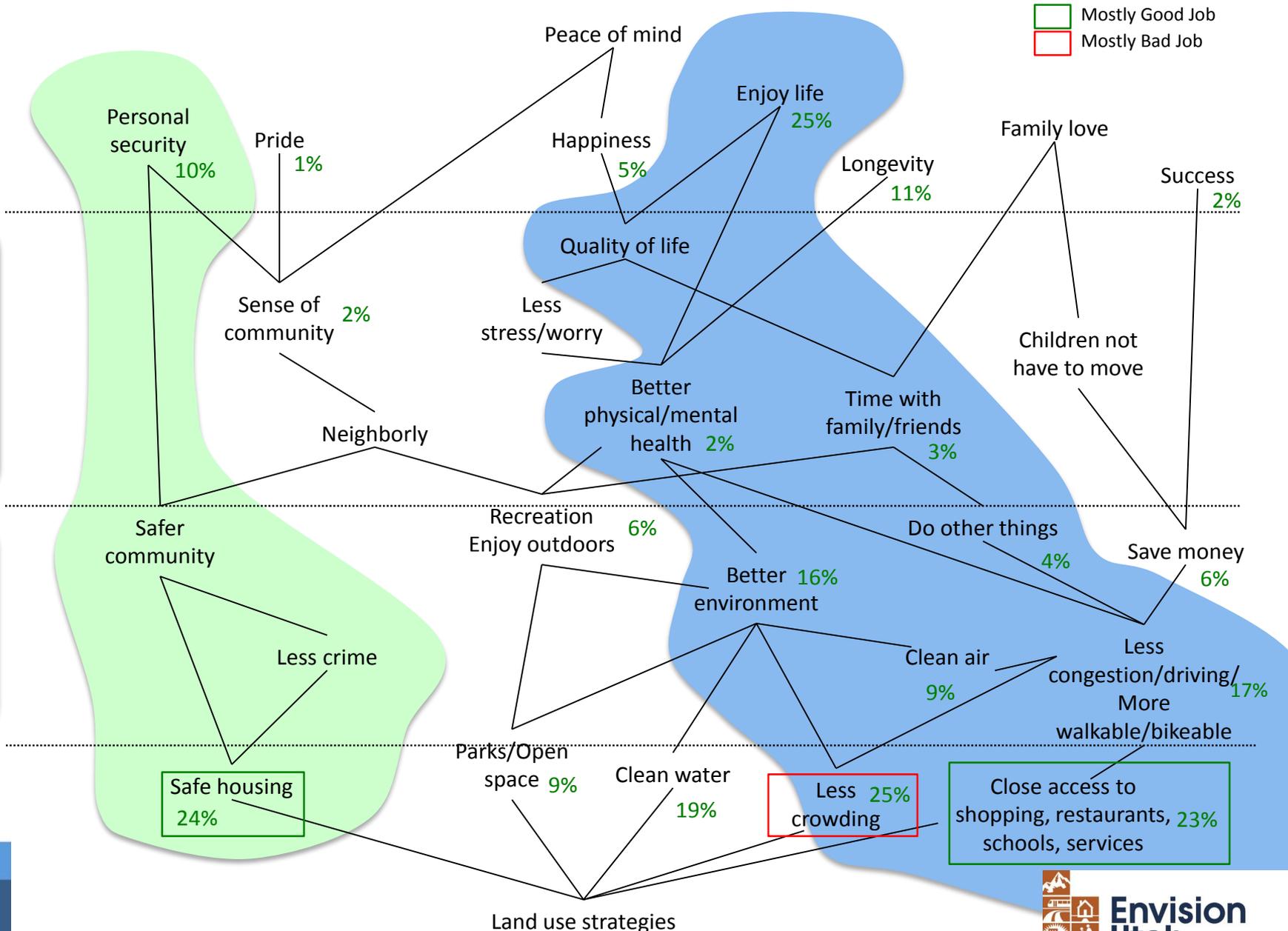
 Mostly Good Job
 Mostly Bad Job

Personal Values

Psychosocial Consequences

Functional Consequences

Attributes



Land Use: How Towns/Cities Grow: Rural Distinction

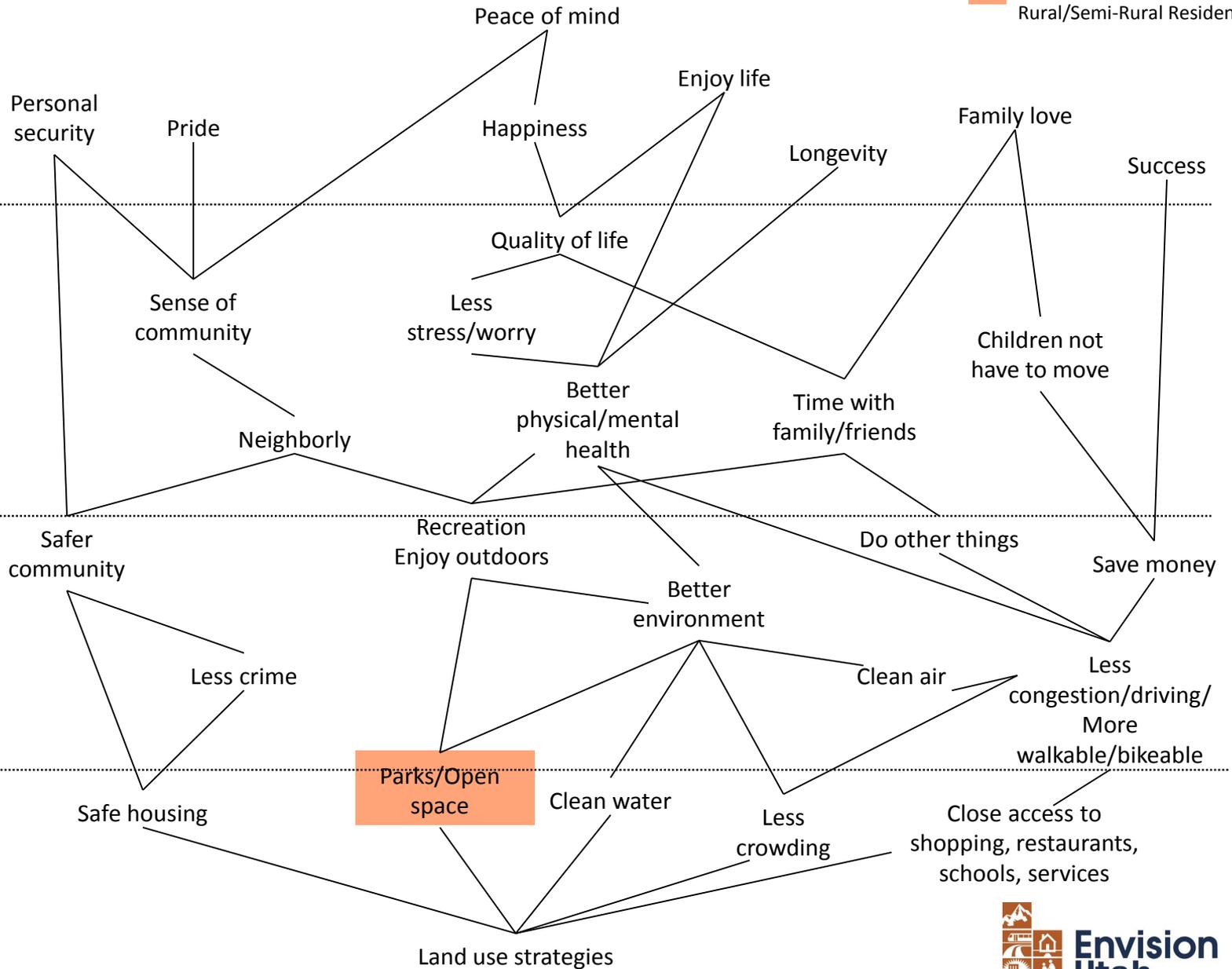
 More Important to Rural/Semi-Rural Residents

Personal Values

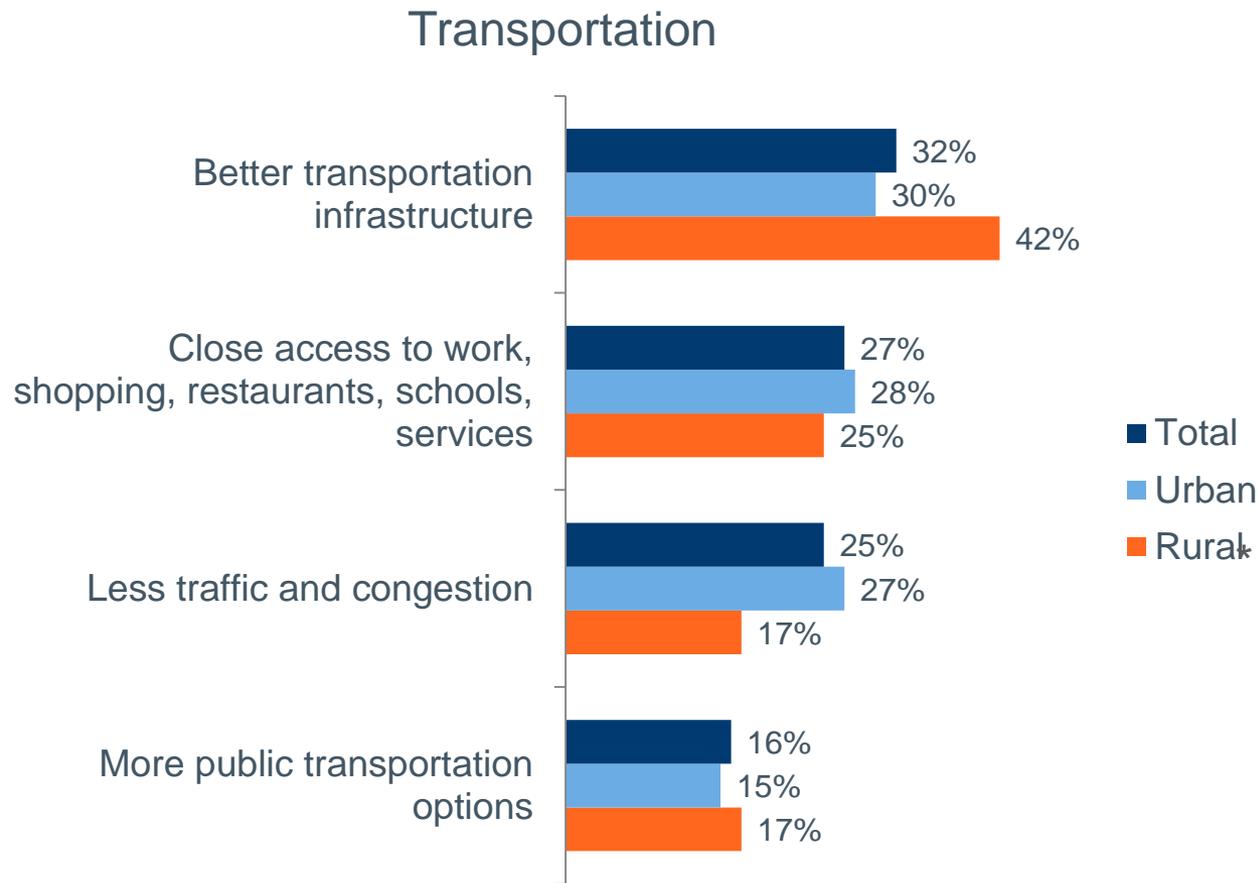
Psychosocial Consequences

Functional Consequences

Attributes



Most agree that the biggest impact in relation to transportation is better infrastructure.



* Note: Extremely small base size. Results should be viewed as directional. Rural is comprised of Semi-Rural and Rural residents.

BASE: ALL QUALIFIED RESPONDENTS (N=167)

Q520. When it comes to transportation, which of the following do you feel has the biggest impact on you and your family personally?

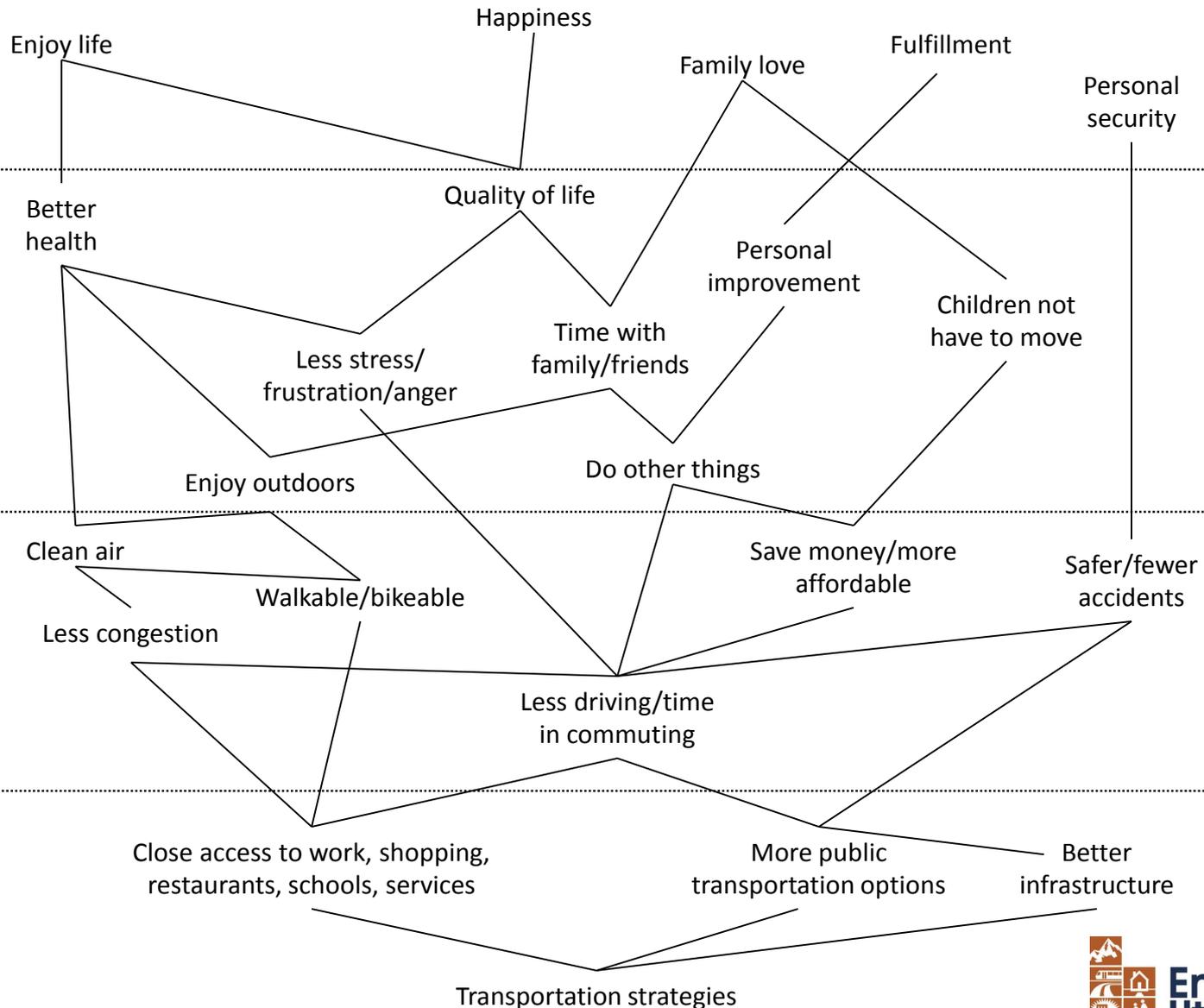
Transportation: Map

Personal Values

Psychosocial Consequences

Functional Consequences

Attributes



Transportation: Pathways

Mostly Good Job

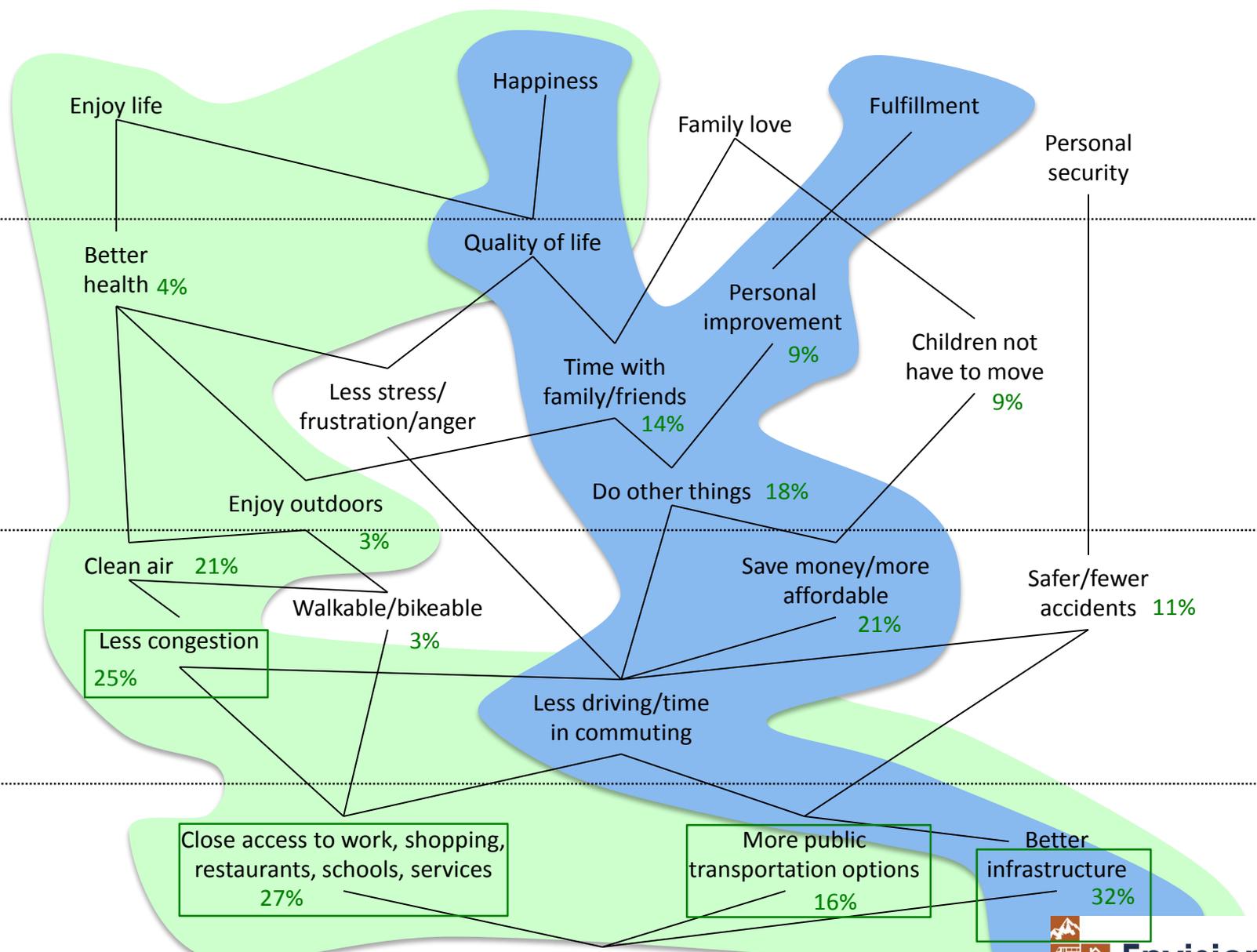
Dominant Pathway
Secondary Pathway

Personal Values

Psychosocial Consequences

Functional Consequences

Attributes



Transportation strategies

Transportation: Rural Distinction

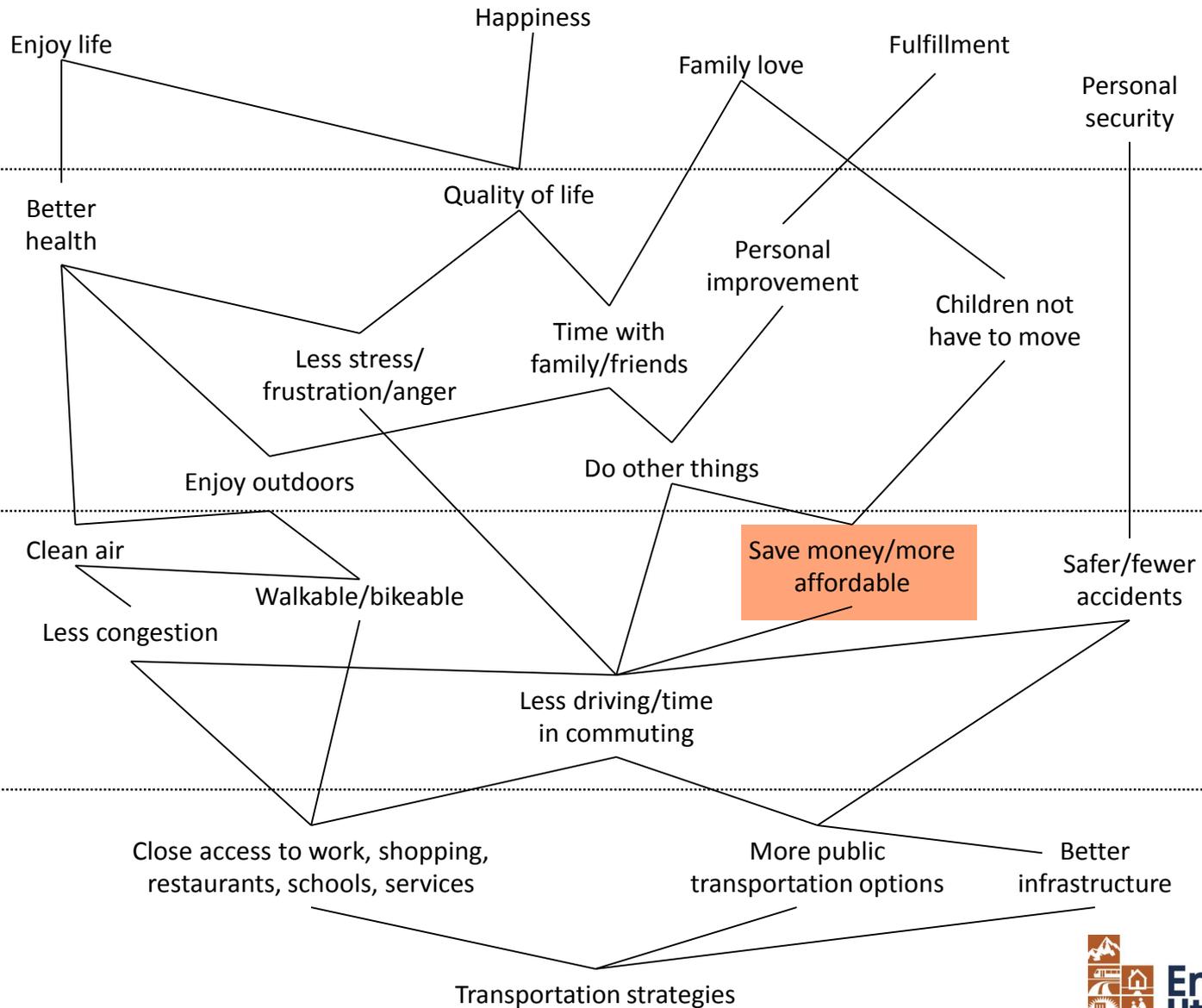
More Important to Rural/Semi-Rural Residents

Personal Values

Psychosocial Consequences

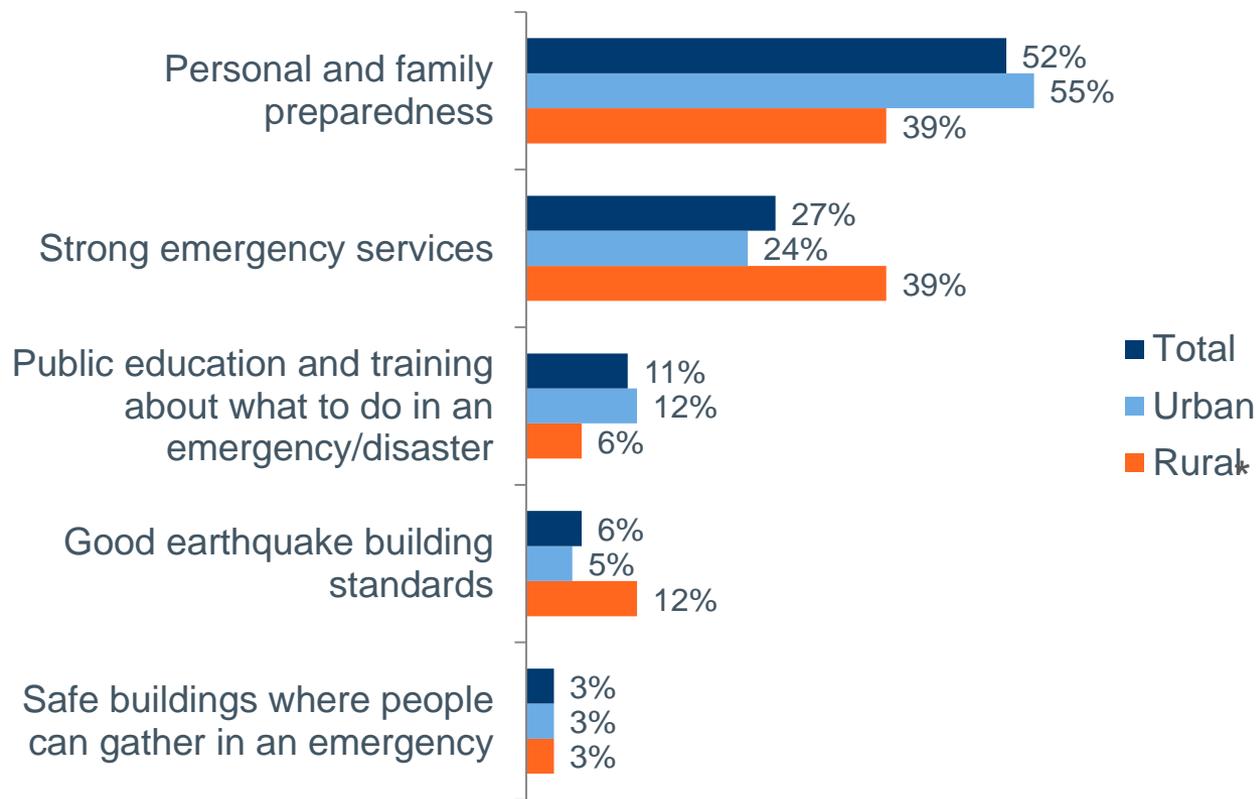
Functional Consequences

Attributes



Urban and Rural Utahns are most impacted by personal and family preparedness while Rural Utahns also indicate strong emergency services as being impactful.

Disaster Resilience



* Note: Extremely small base size. Results should be viewed as directional. Rural is comprised of Semi-Rural and Rural residents.

BASE: ALL QUALIFIED RESPONDENTS (N=166)

Q530. When it comes to emergency preparedness and the ability to recover from a disaster, which of the following do you feel has the biggest impact on you and your family personally?

Disaster Resilience: Map

Personal Values

Psychosocial Consequences

Functional Consequences

Attributes



Disaster Resilience: Pathways

□ Mostly Good Job

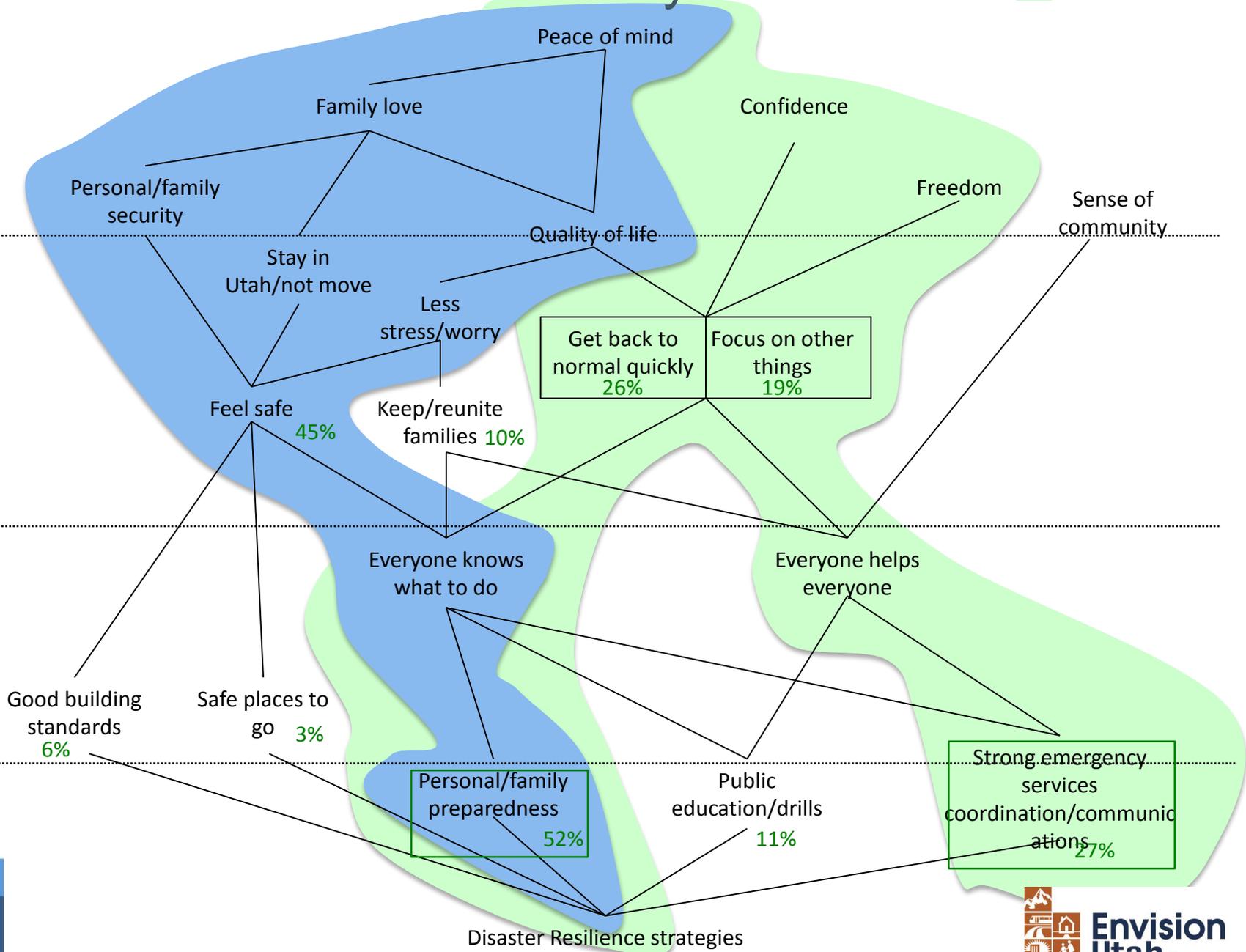
■ Dominant Pathway
■ Secondary Pathway

Personal Values

Psychosocial Consequences

Functional Consequences

Attributes



Disaster Resilience: Rural Distinction

More Important to Rural/Semi-Rural Residents

Personal Values

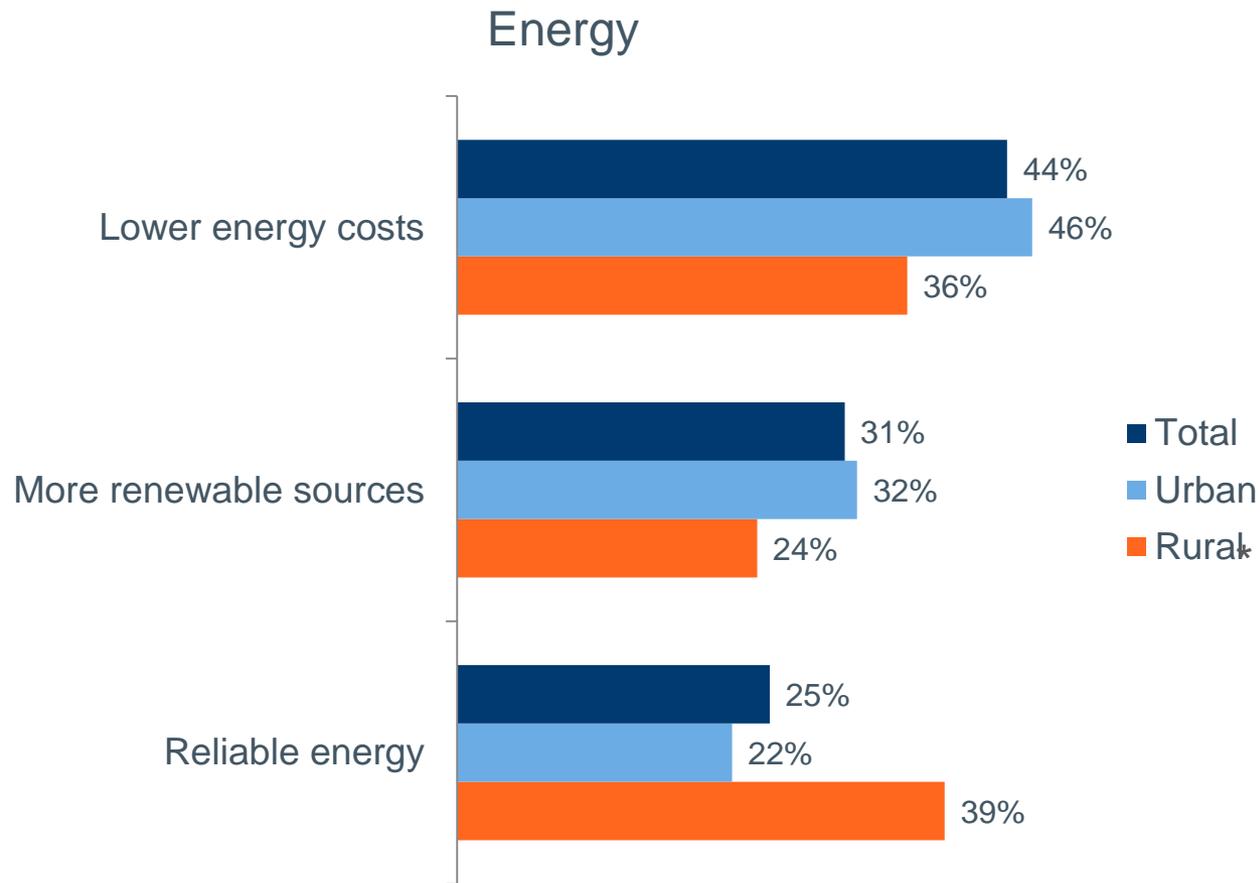
Psychosocial Consequences

Functional Consequences

Attributes



Low energy costs have the most impact on Utahns.

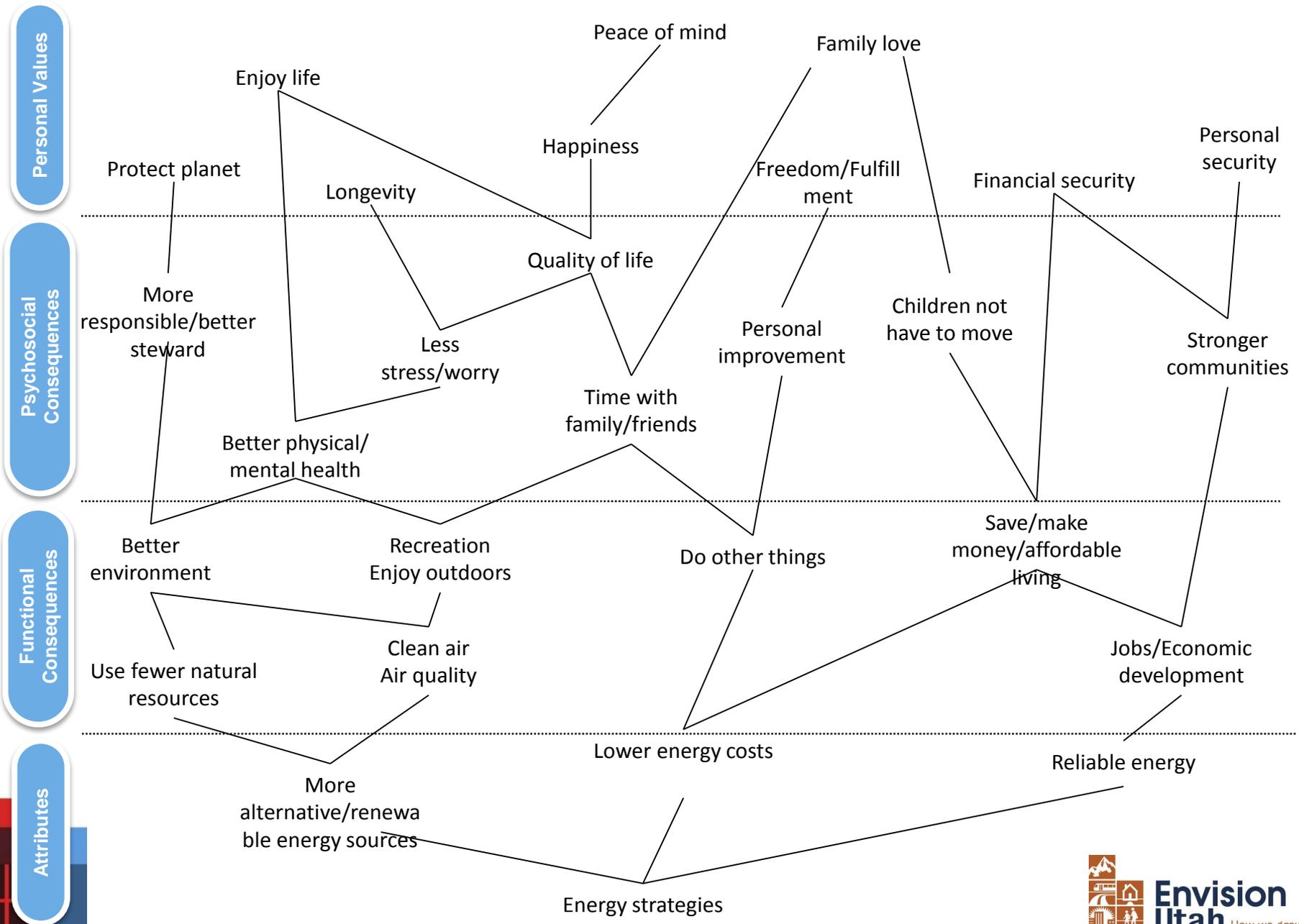


* Note: Extremely small base size. Results should be viewed as directional. Rural is comprised of Semi-Rural and Rural residents.

BASE: ALL QUALIFIED RESPONDENTS (N=167)

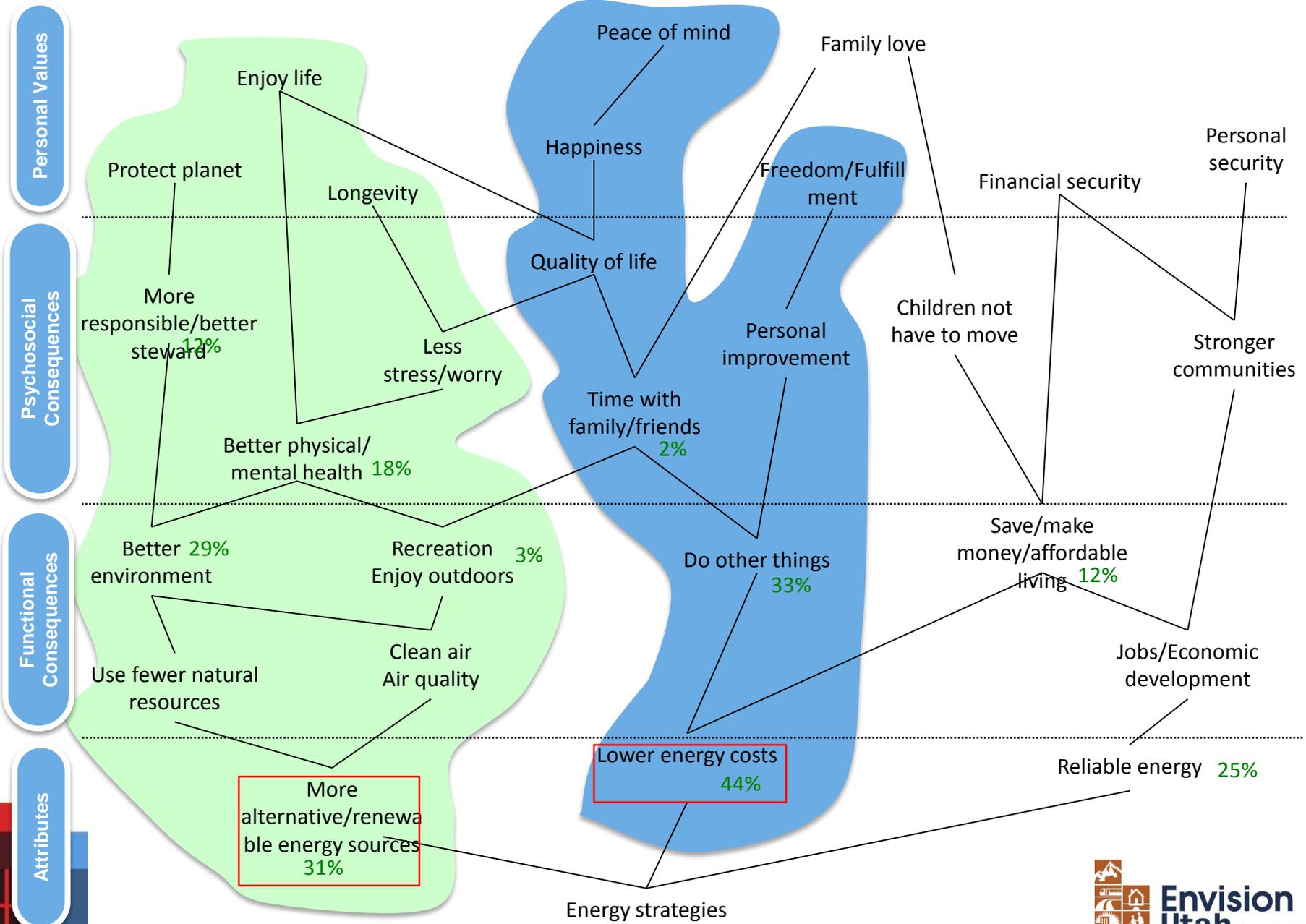
Q535. When it comes to energy, which of the following do you feel would have the biggest impact on you and your family personally?

Energy: Map



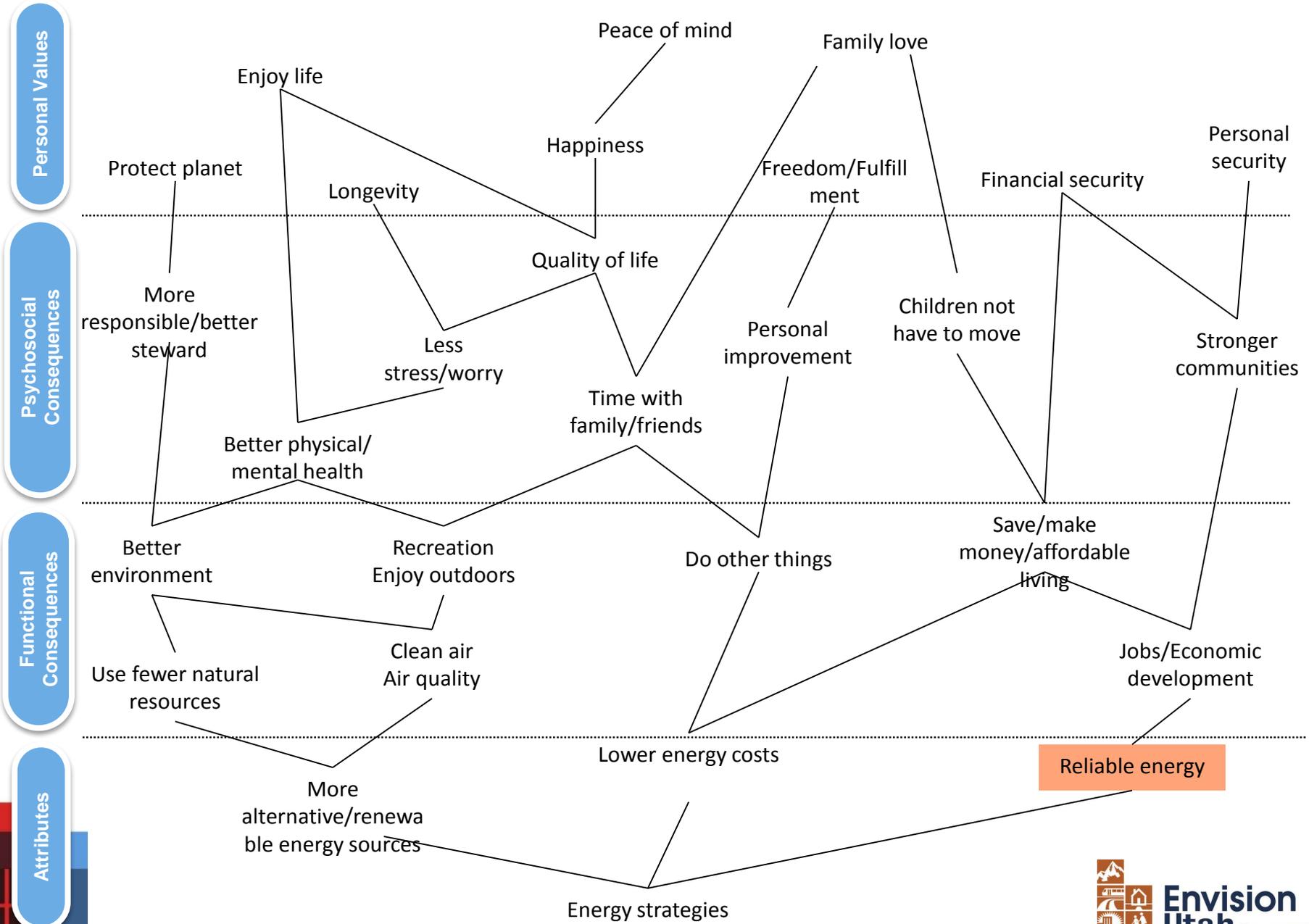
Energy: Pathways

█ Dominant Pathway
█ Secondary Pathway
 Mostly Bad Job



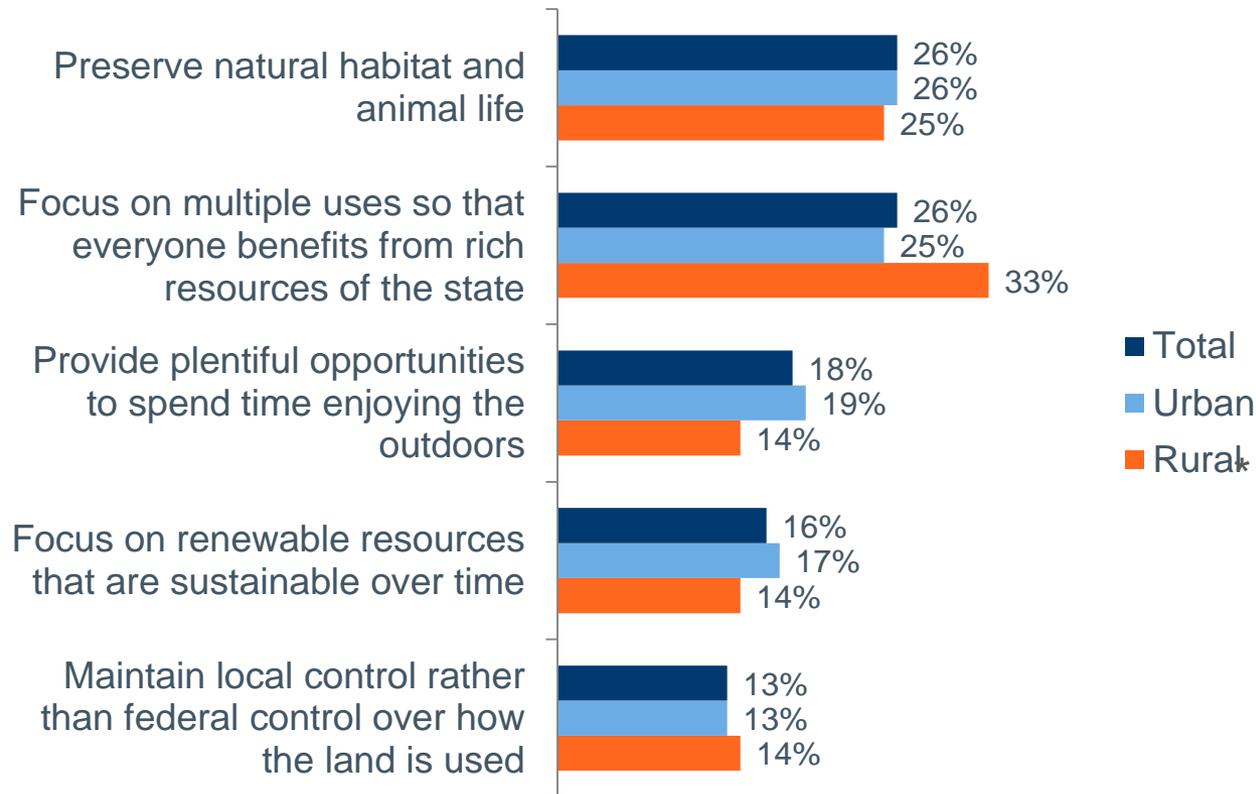
Energy: Rural Distinction

More Important to Rural/Semi-Rural Residents



With regard to natural lands, Urban Utahns feel the strongest impact from preserving habitats and focusing on multiple uses to benefit everyone while Rural Utahns are most impacted by the latter.

Natural Lands



* Note: Extremely small base size. Results should be viewed as directional. Rural is comprised of Semi-Rural and Rural residents.

BASE: ALL QUALIFIED RESPONDENTS (N=168)

Q540. When it comes to our natural lands here in Utah, which of the following do you feel is most important for you and your family personally?

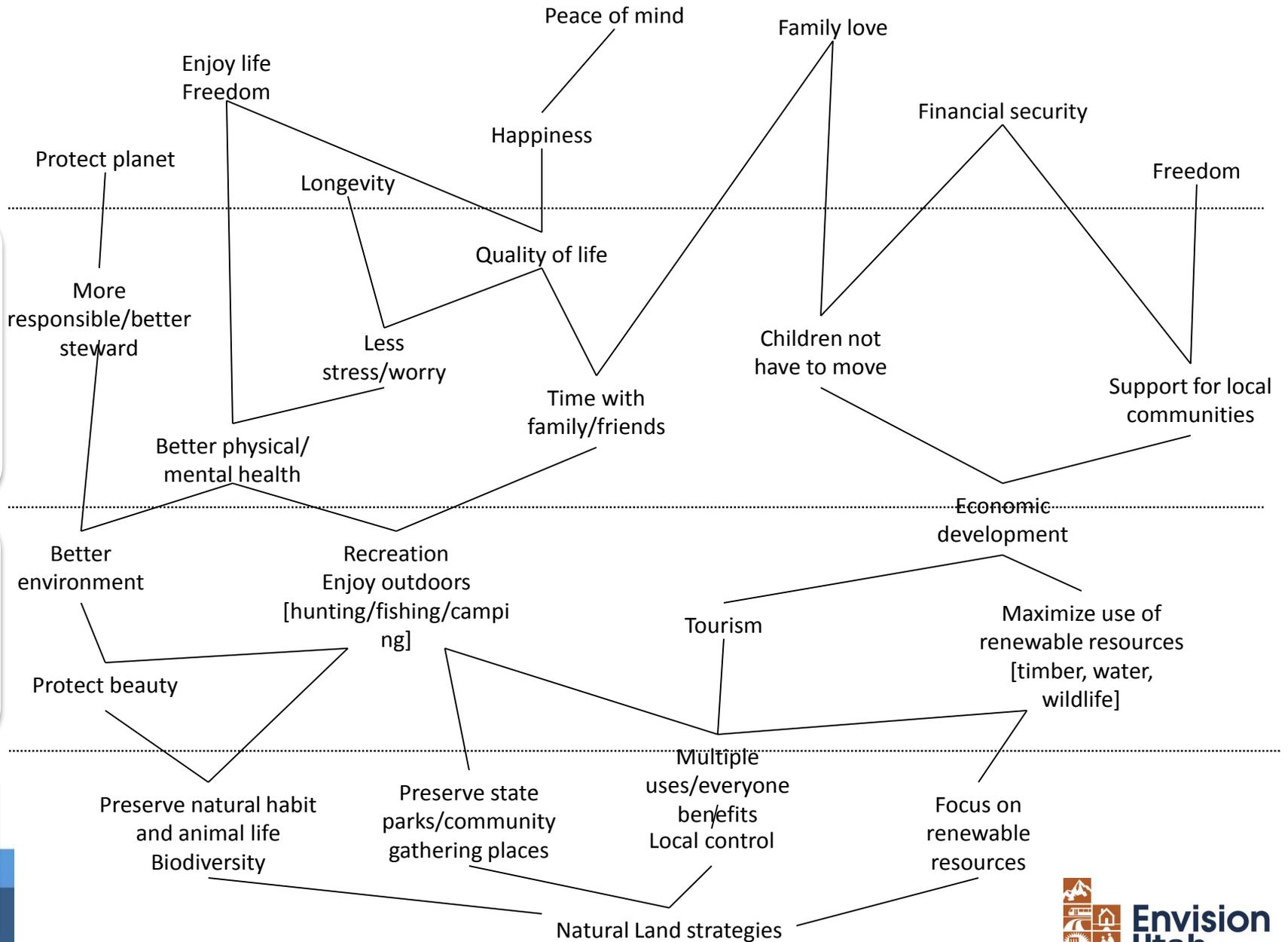
Natural Lands: Map

Personal Values

Psychosocial Consequences

Functional Consequences

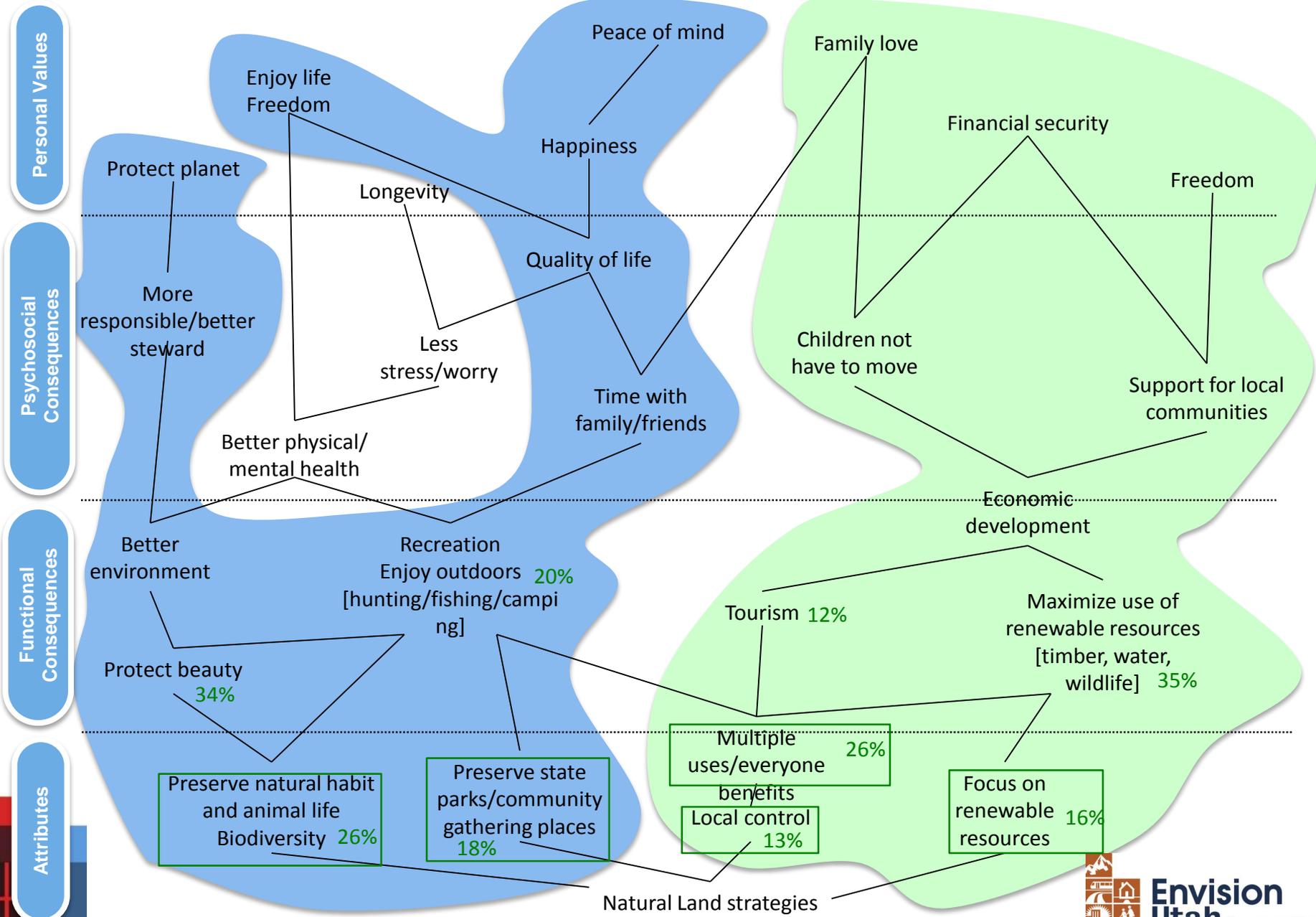
Attributes



Natural Lands: Pathways

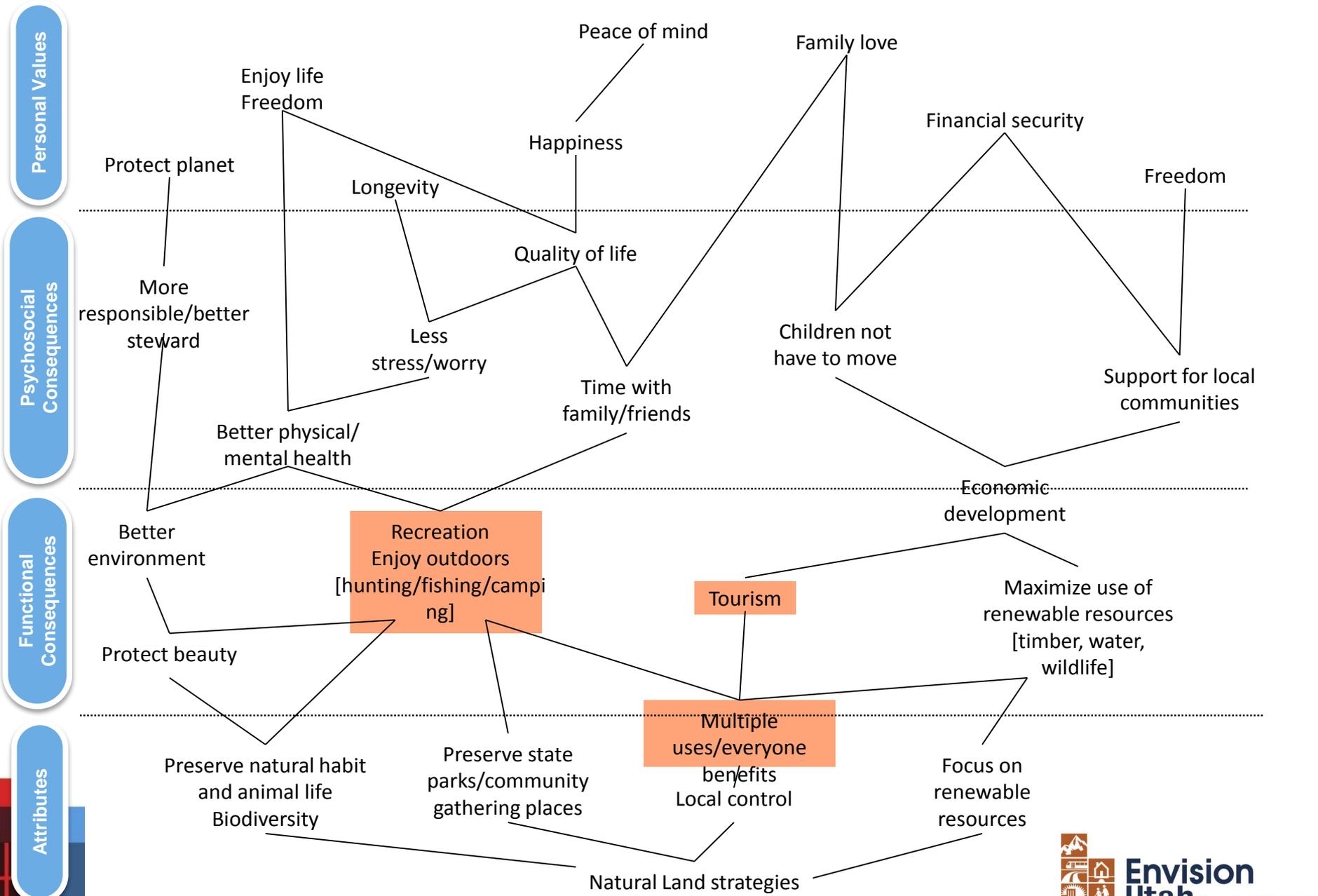
□ Mostly Good Job

■ Dominant Pathway
■ Secondary Pathway



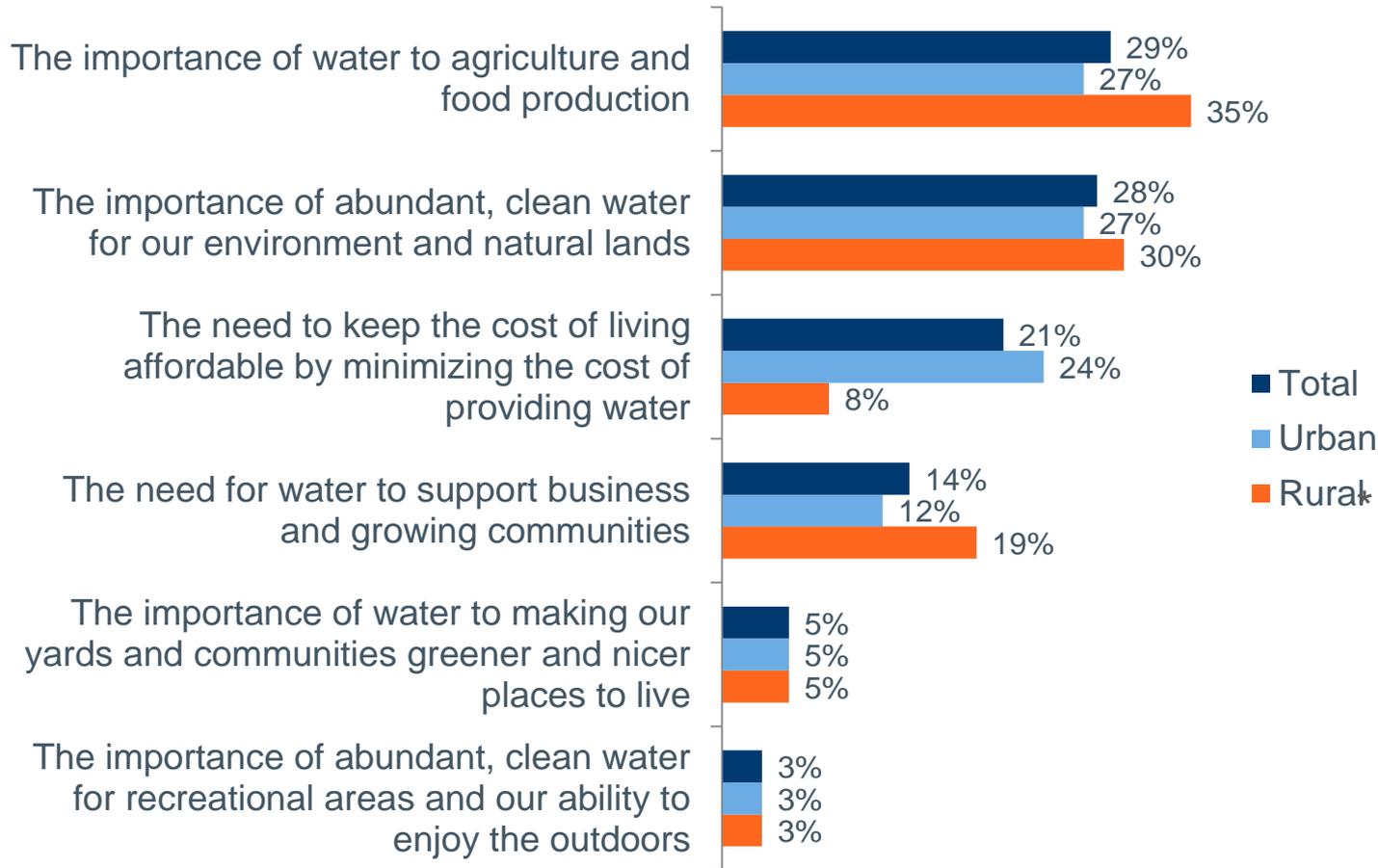
Natural Lands: Rural Distinction

More Important to Rural/Semi-Rural Residents



The importance of water for agriculture and food production as well as for the environment and natural lands are the two most impactful items across both Urban and Rural Utahns.

Water



* Note: Extremely small base size. Results should be viewed as directional. Rural is comprised of Semi-Rural and Rural residents.
 BASE: ALL QUALIFIED RESPONDENTS (N=167)
 Q550. When it comes to water, which of the following do you feel would have the biggest impact on you and your family personally?

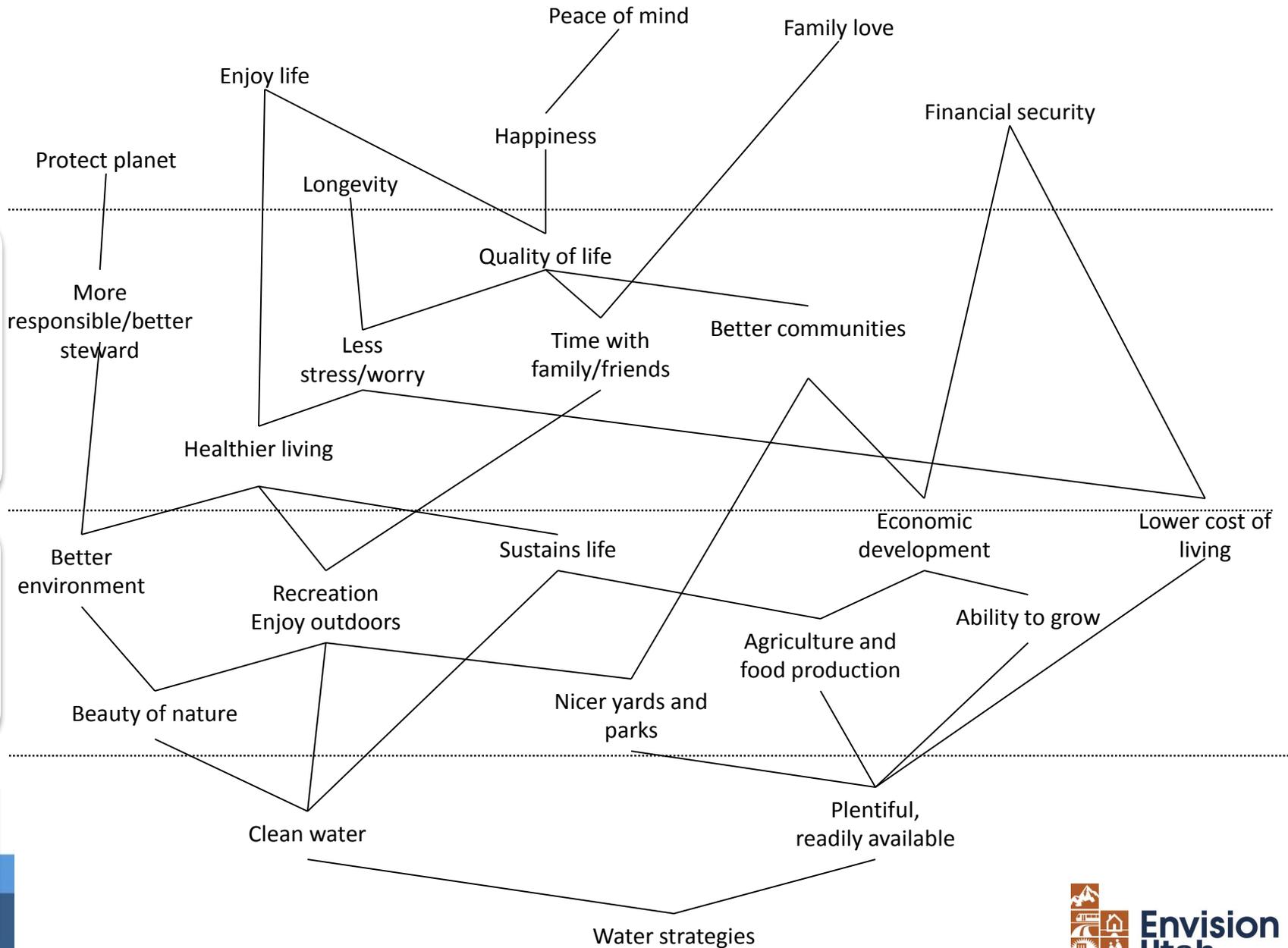
Water: Map

Personal Values

Psychosocial Consequences

Functional Consequences

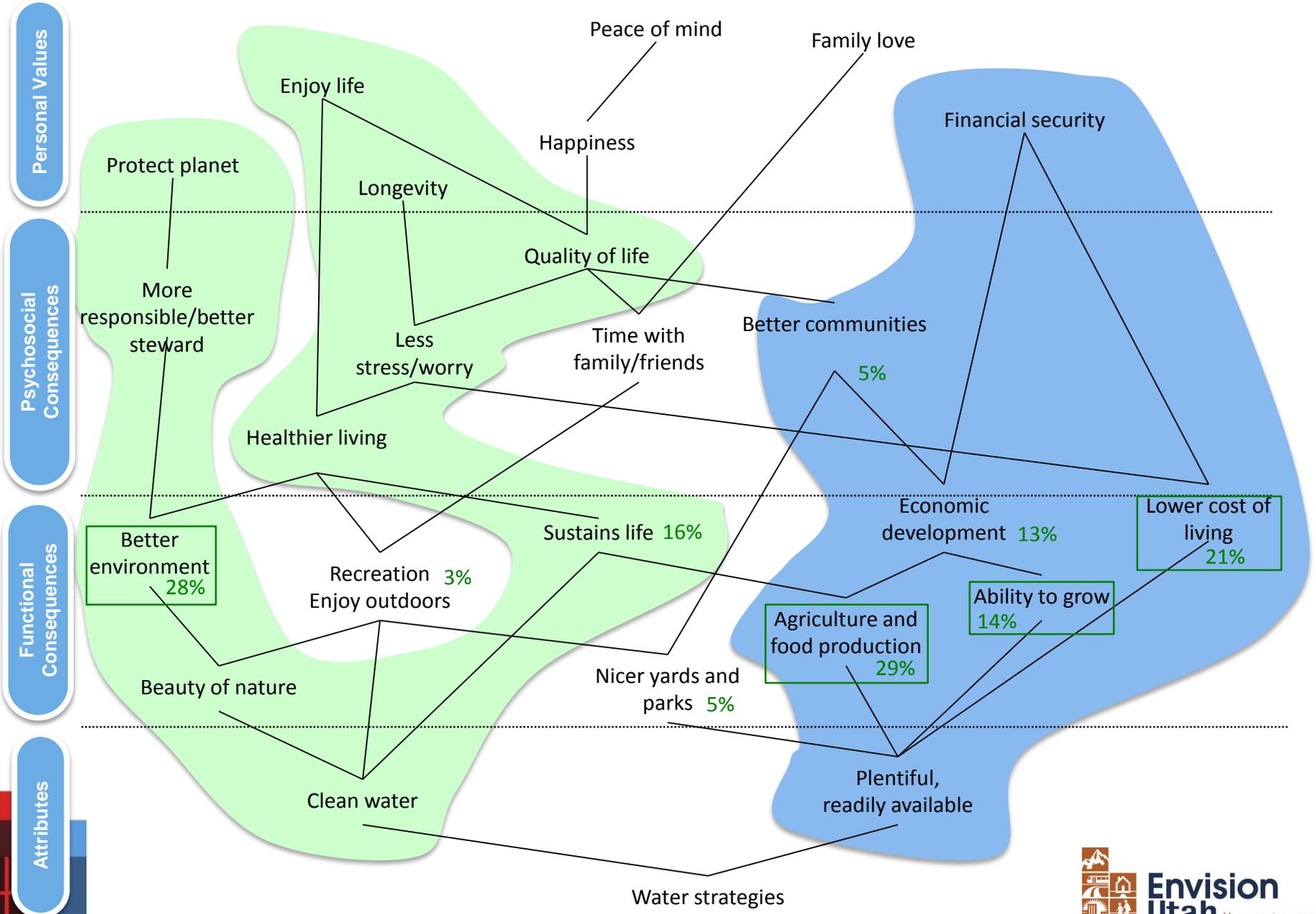
Attributes



Water: Pathways

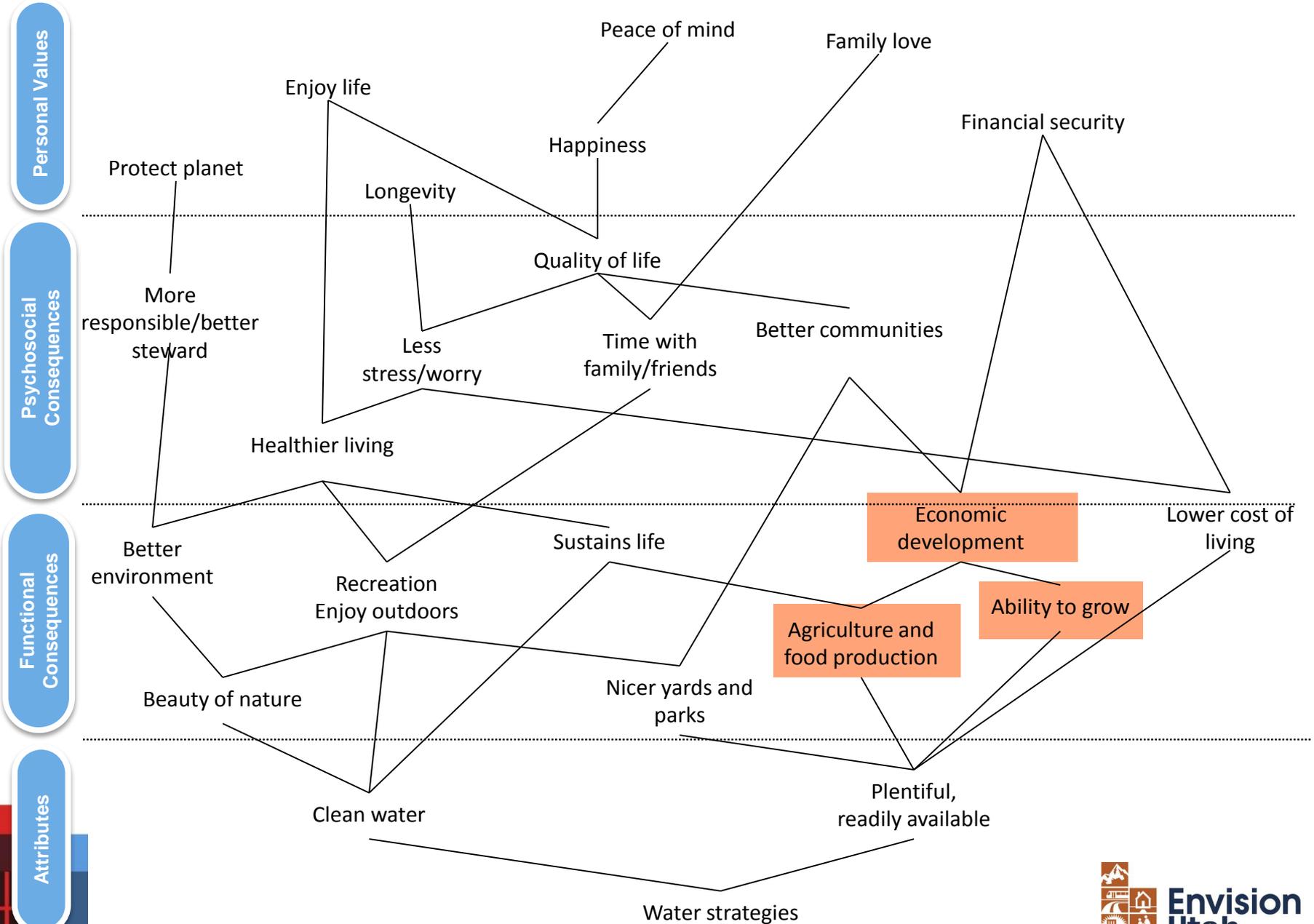
Mostly Good Job

Dominant Pathway
Secondary Pathway



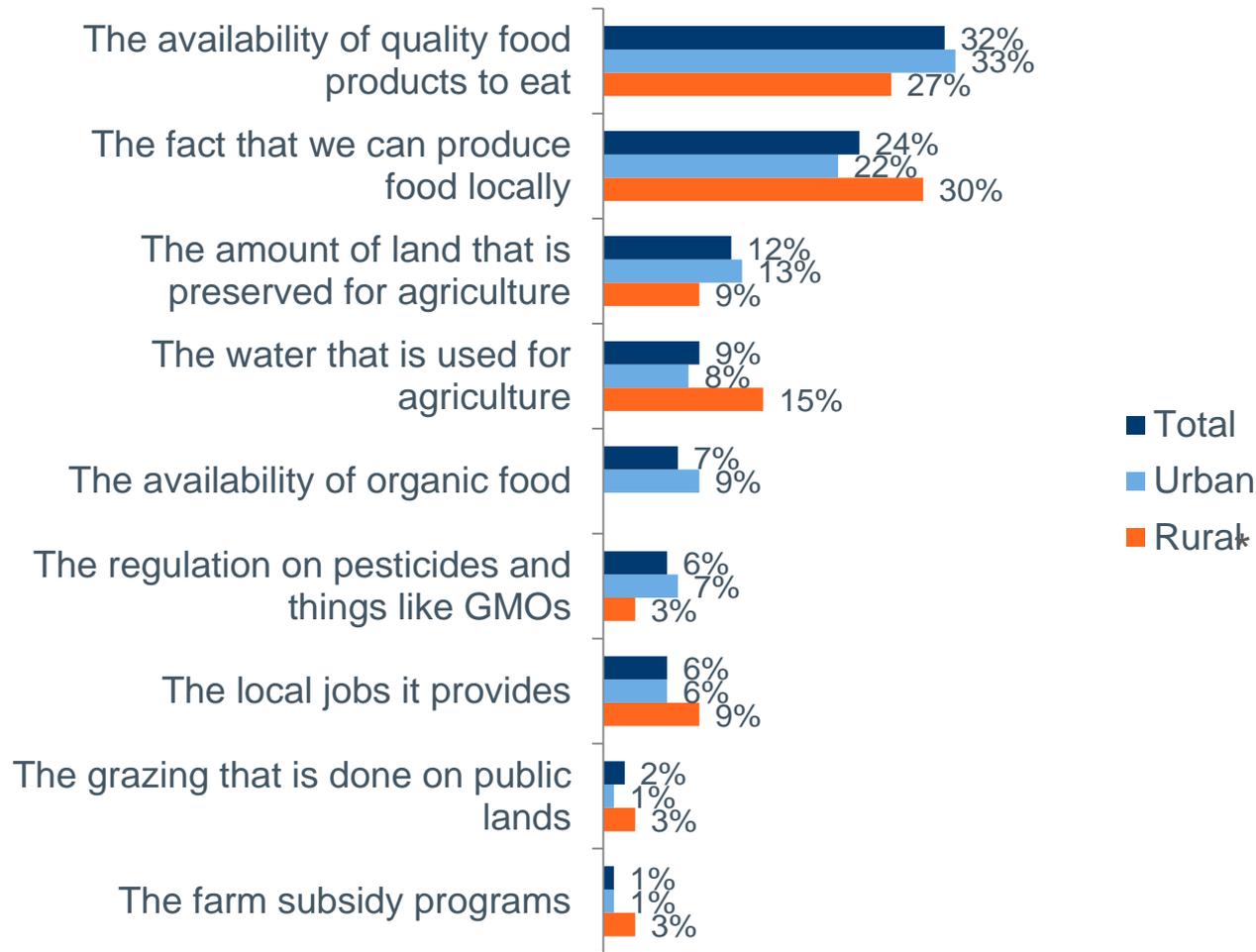
Water: Rural Distinction

More Important to Rural/Semi-Rural Residents



Urban Utahns are most impacted by the availability of quality food products, while Rural Utahns view local food production as most impactful.

Agriculture



* Note: Extremely small base size. Results should be viewed as directional. Rural is comprised of Semi-Rural and Rural residents.

BASE: ALL QUALIFIED RESPONDENTS (N=166)

Q560. When it comes to agriculture, which of the following do you feel would have the biggest impact on you and your family personally?

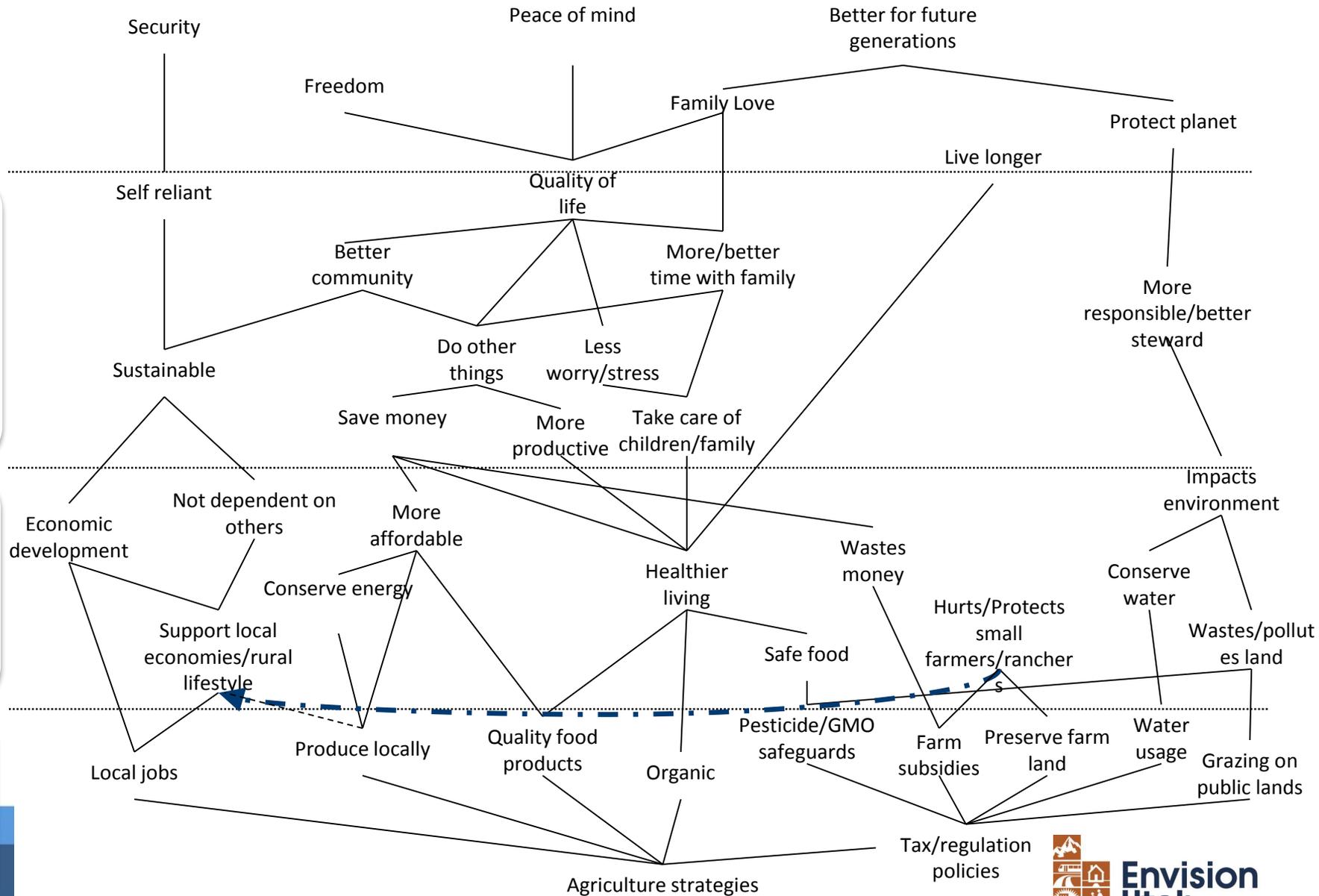
Agriculture: Map

Personal Values

Psychosocial Consequences

Functional Consequences

Attributes



Agriculture: Pathways

Mostly Good Job

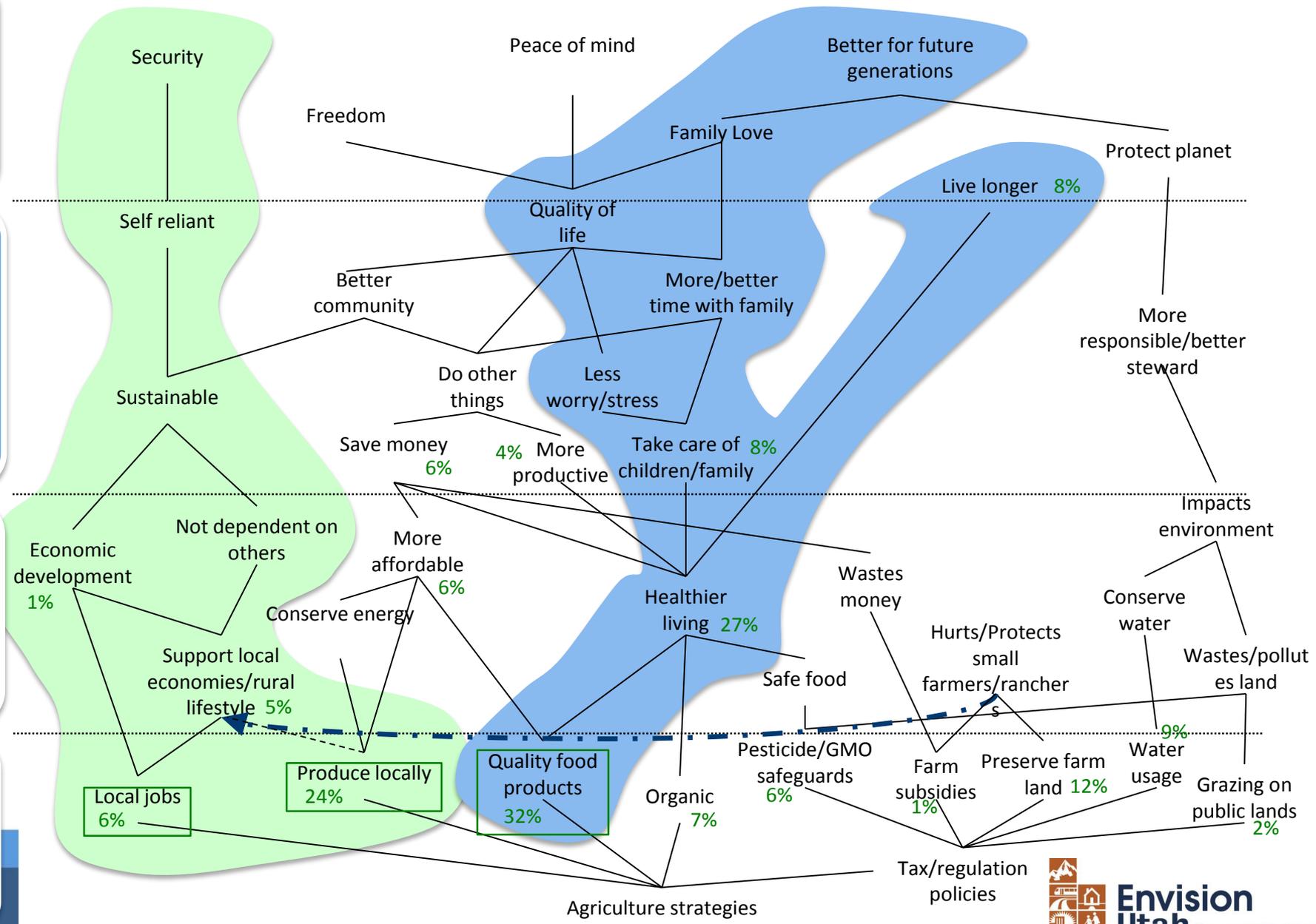
Dominant Pathway
Secondary Pathway

Personal Values

Psychosocial Consequences

Functional Consequences

Attributes



Agriculture: Rural Distinction

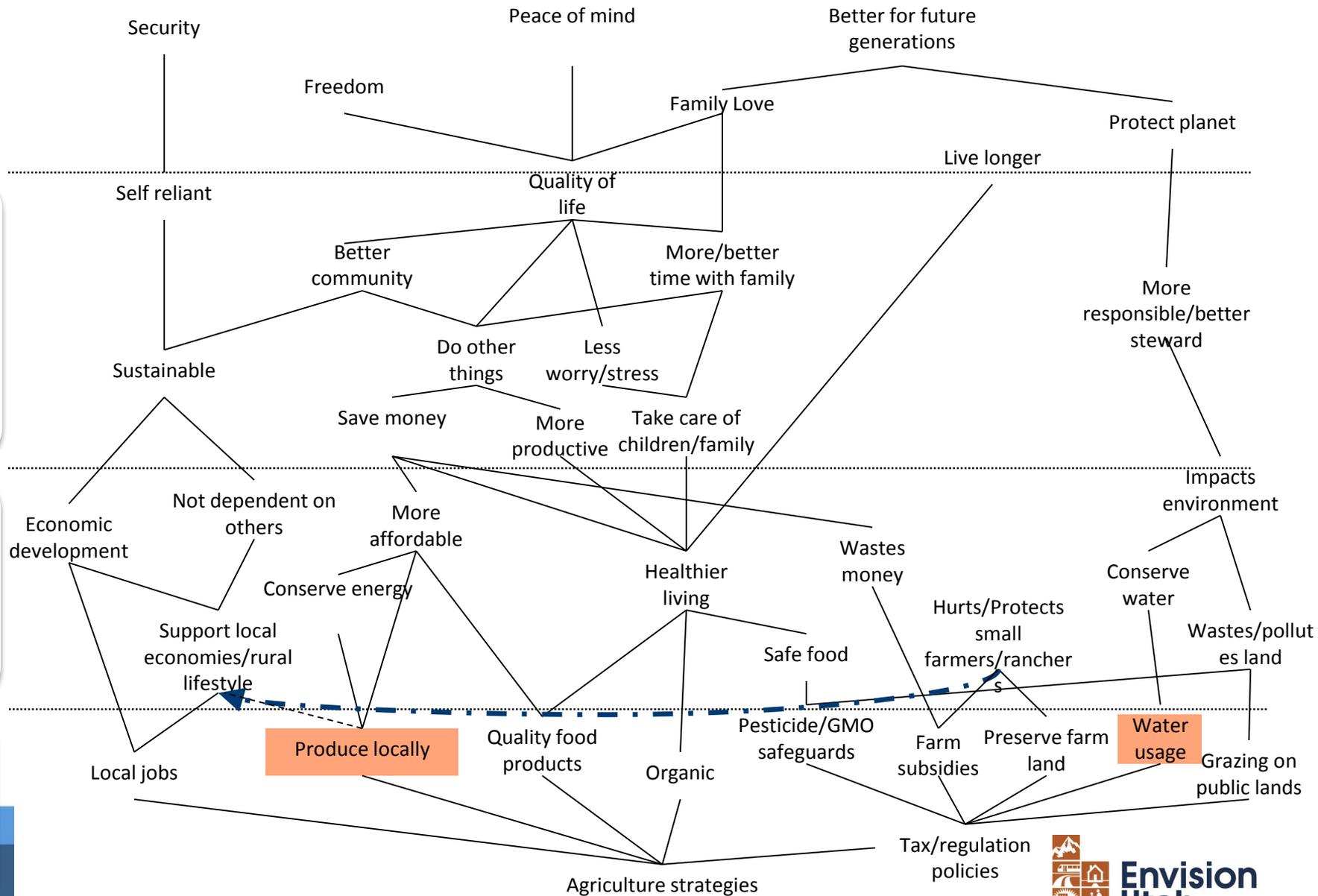
More Important to Rural/Semi-Rural Residents

Personal Values

Psychosocial Consequences

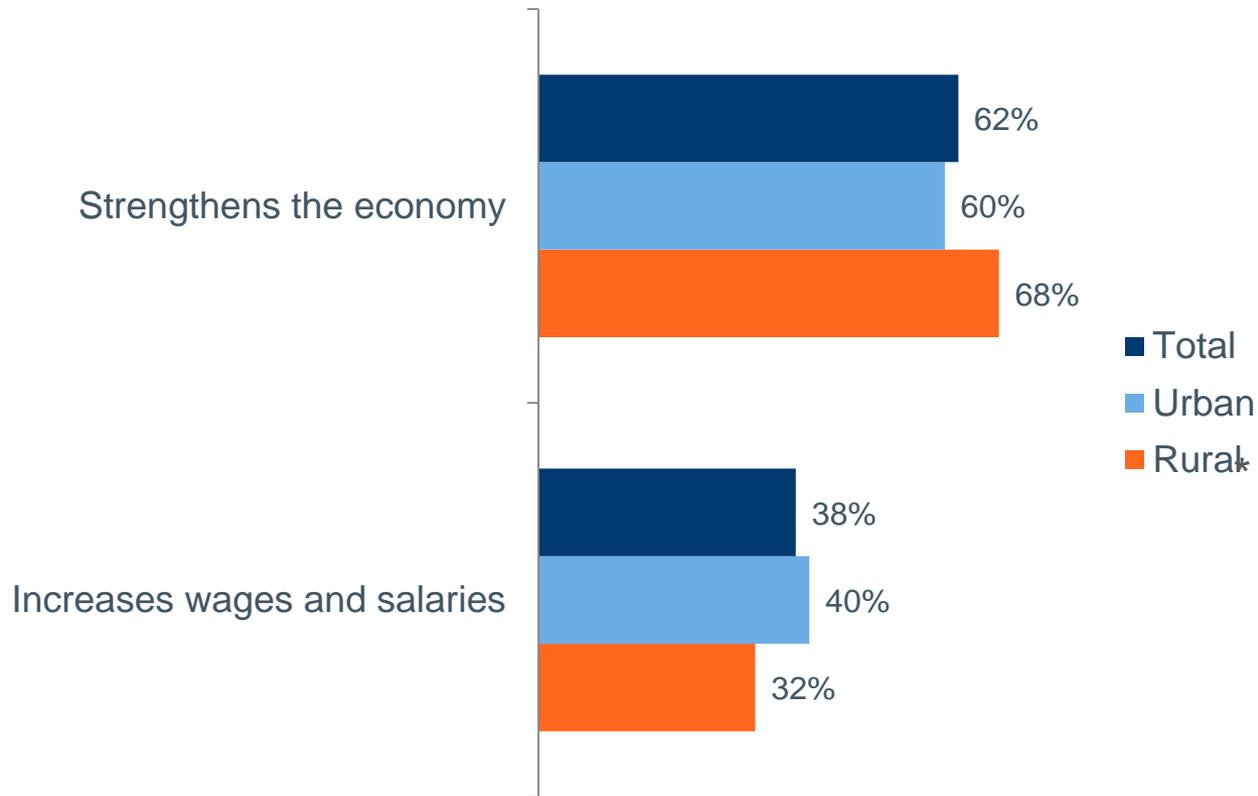
Functional Consequences

Attributes



A strengthened economy is more impactful to Utahns than increased wages and salaries.

Economic Development



* Note: Extremely small base size. Results should be viewed as directional. Rural is comprised of Semi-Rural and Rural residents.

BASE: ALL QUALIFIED RESPONDENTS (N=167)

Q570. When it comes to economic development, which of the following do you feel would have the biggest impact on you and your family personally?

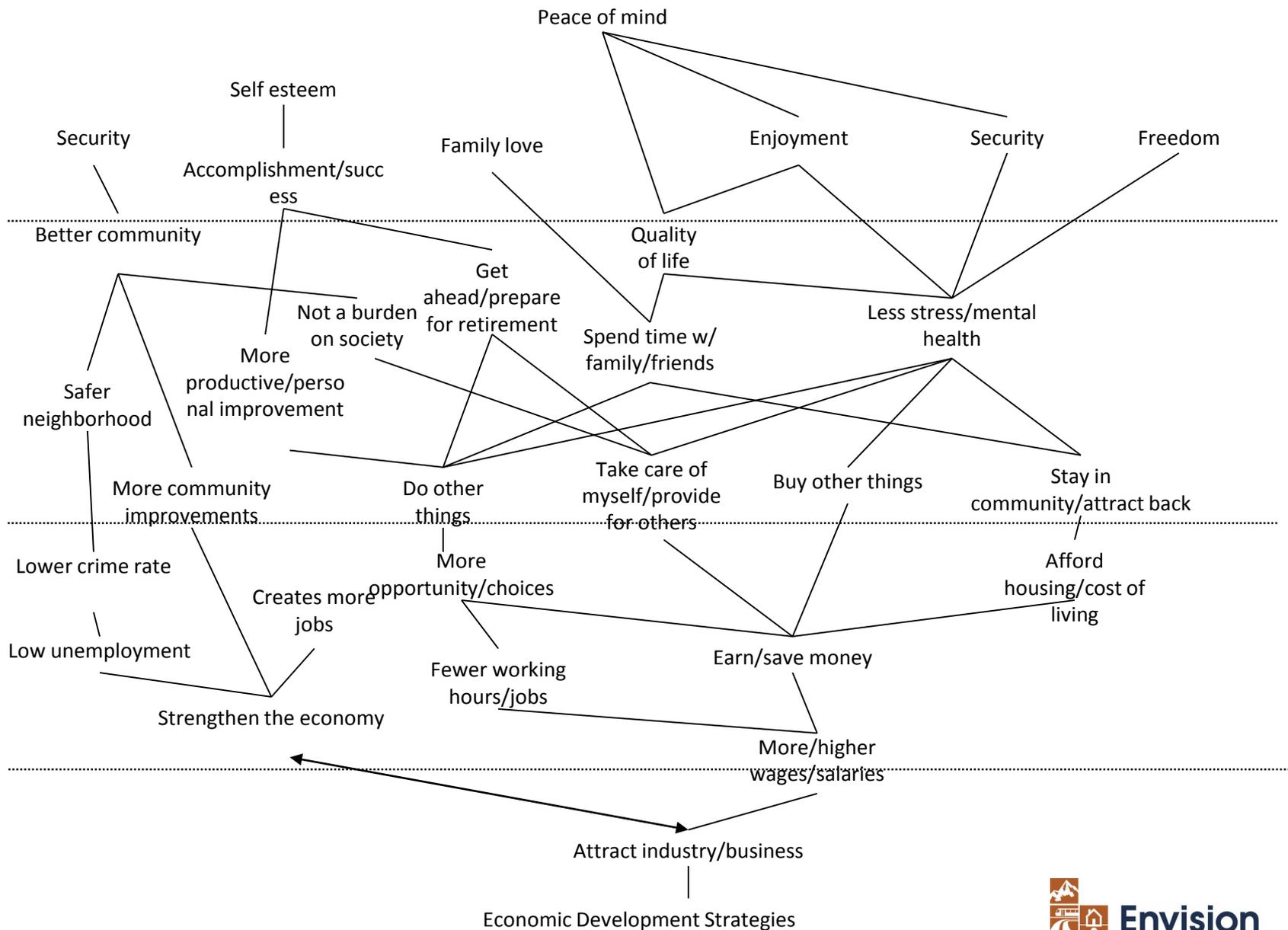
Economic Development: Map

Personal Values

Psychosocial Consequences

Functional Consequences

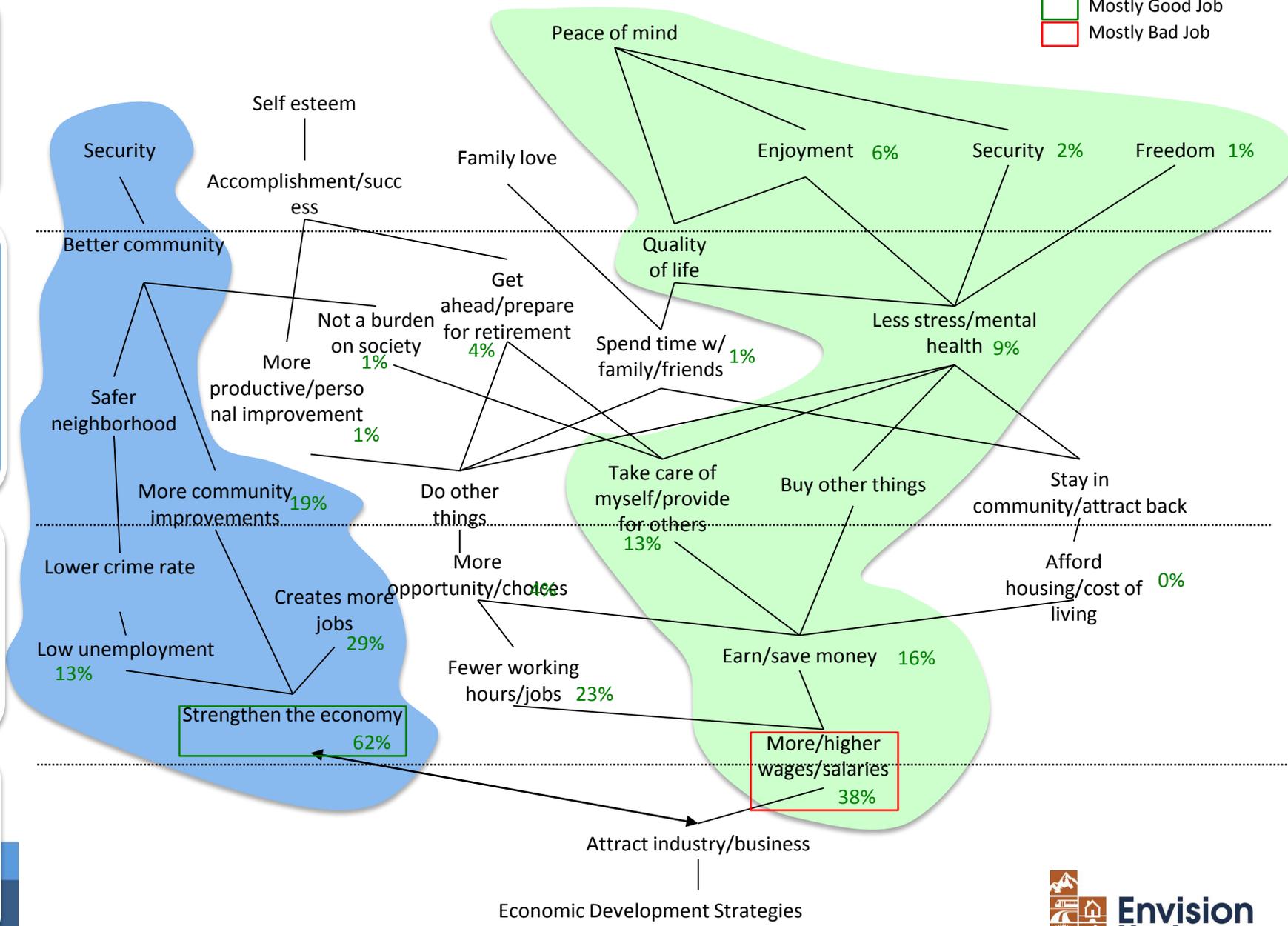
Attributes



Economic Development: Pathways

- Dominant Pathway
- Secondary Pathway
- Mostly Good Job
- Mostly Bad Job

- Personal Values
- Psychosocial Consequences
- Functional Consequences
- Attributes



Economic Development: Rural Distinction

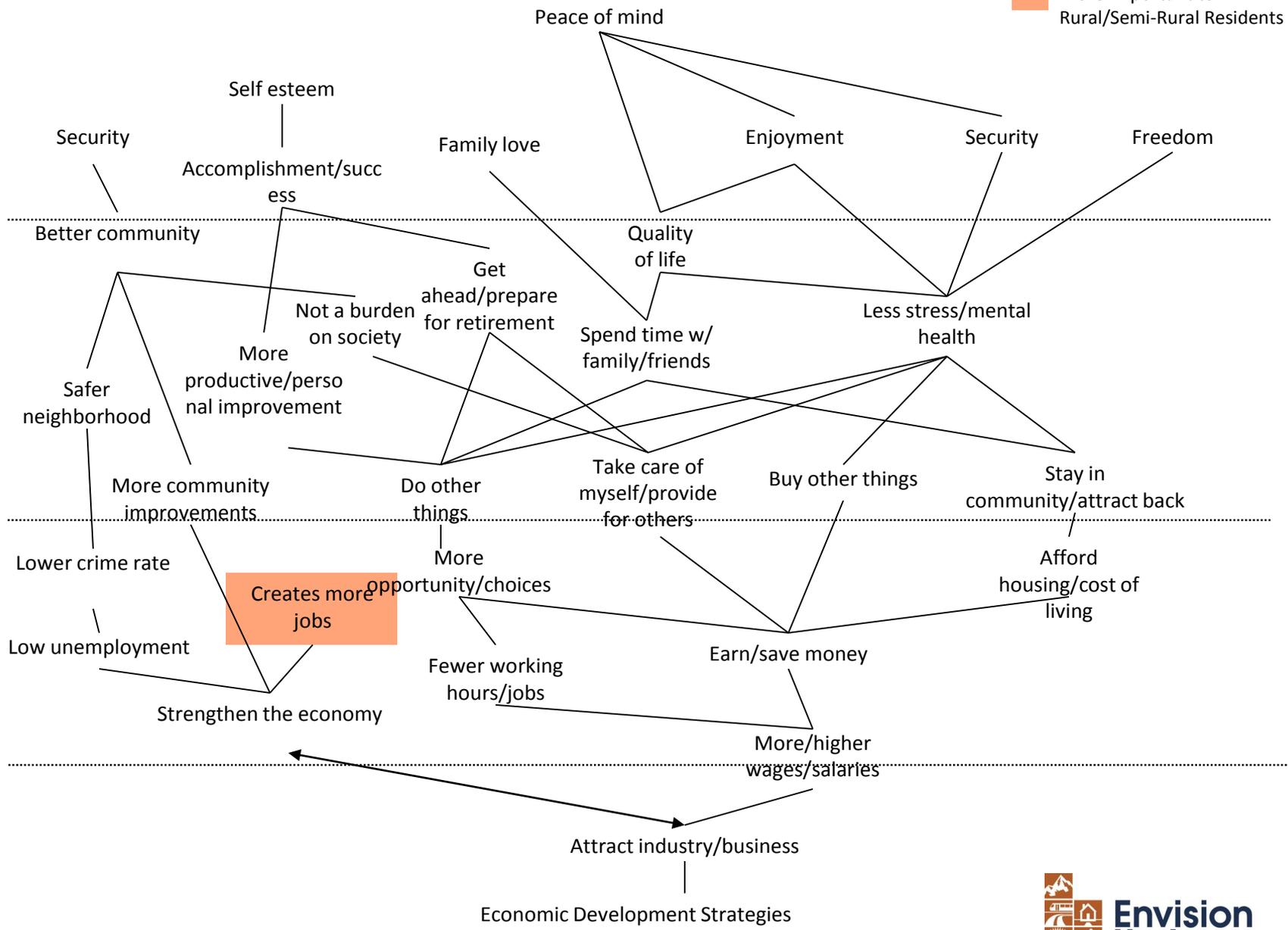
■ More Important to Rural/Semi-Rural Residents

Personal Values

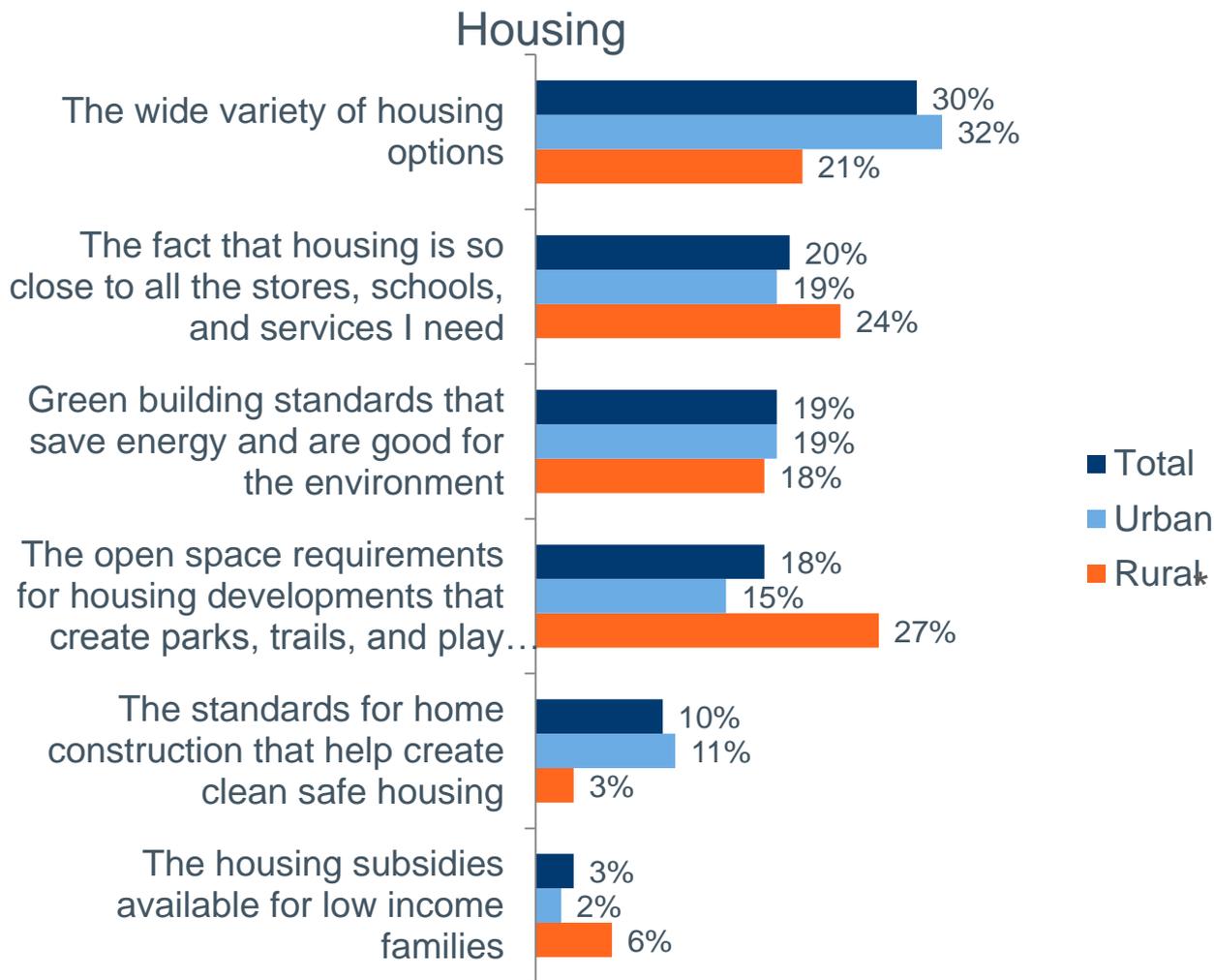
Psychosocial Consequences

Functional Consequences

Attributes



Urban Utahns view a wide variety of housing options as having the biggest impact, while Rural Utahns indicate that open space requirements that create parks and trails are most impactful.



* Note: Extremely small base size. Results should be viewed as directional. Rural is comprised of Semi-Rural and Rural residents.

BASE: ALL QUALIFIED RESPONDENTS (N=166)

Q580. When it comes to housing, which of the following do you feel would have the biggest impact on you and your family personally?

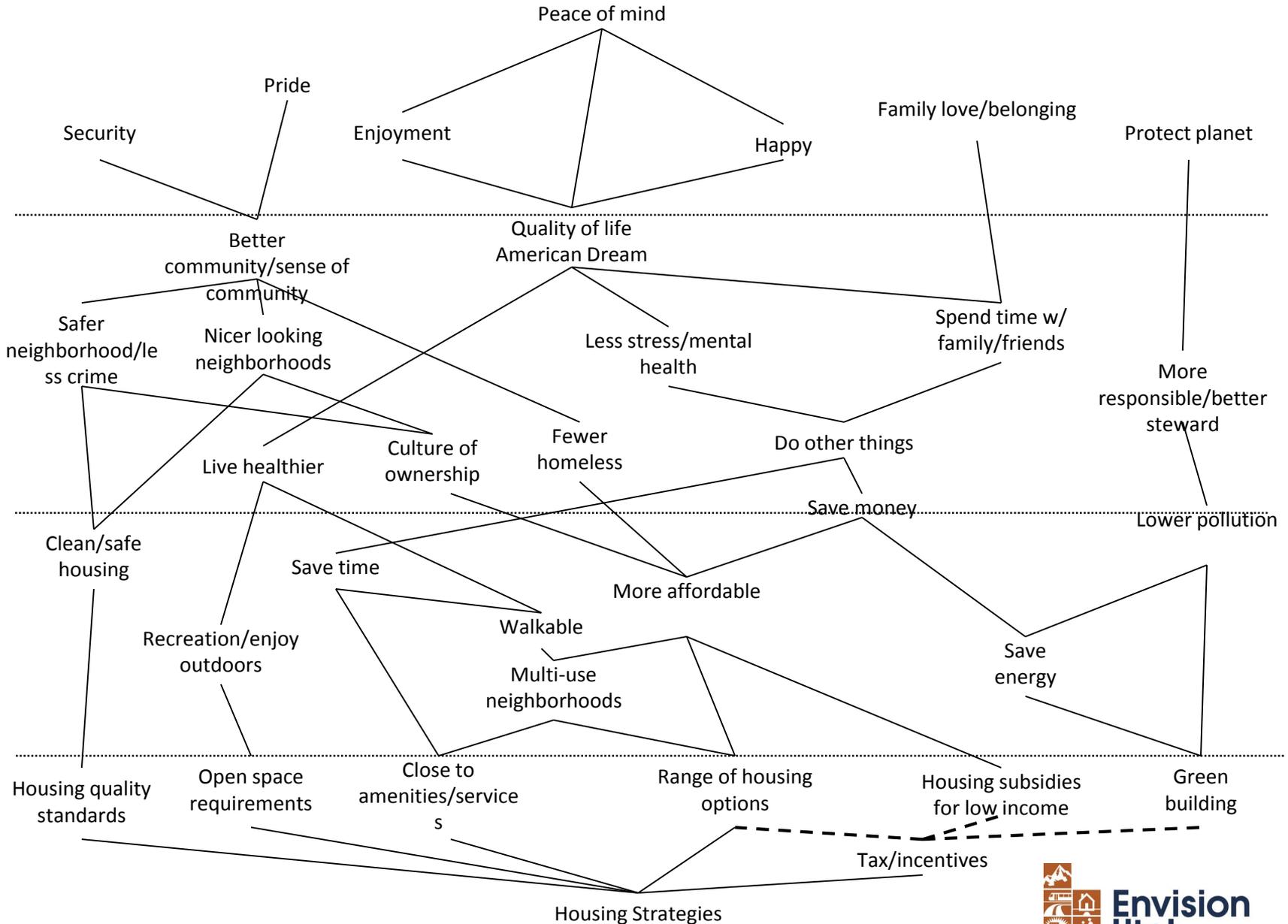
Housing: Map

Personal Values

Psychosocial Consequences

Functional Consequences

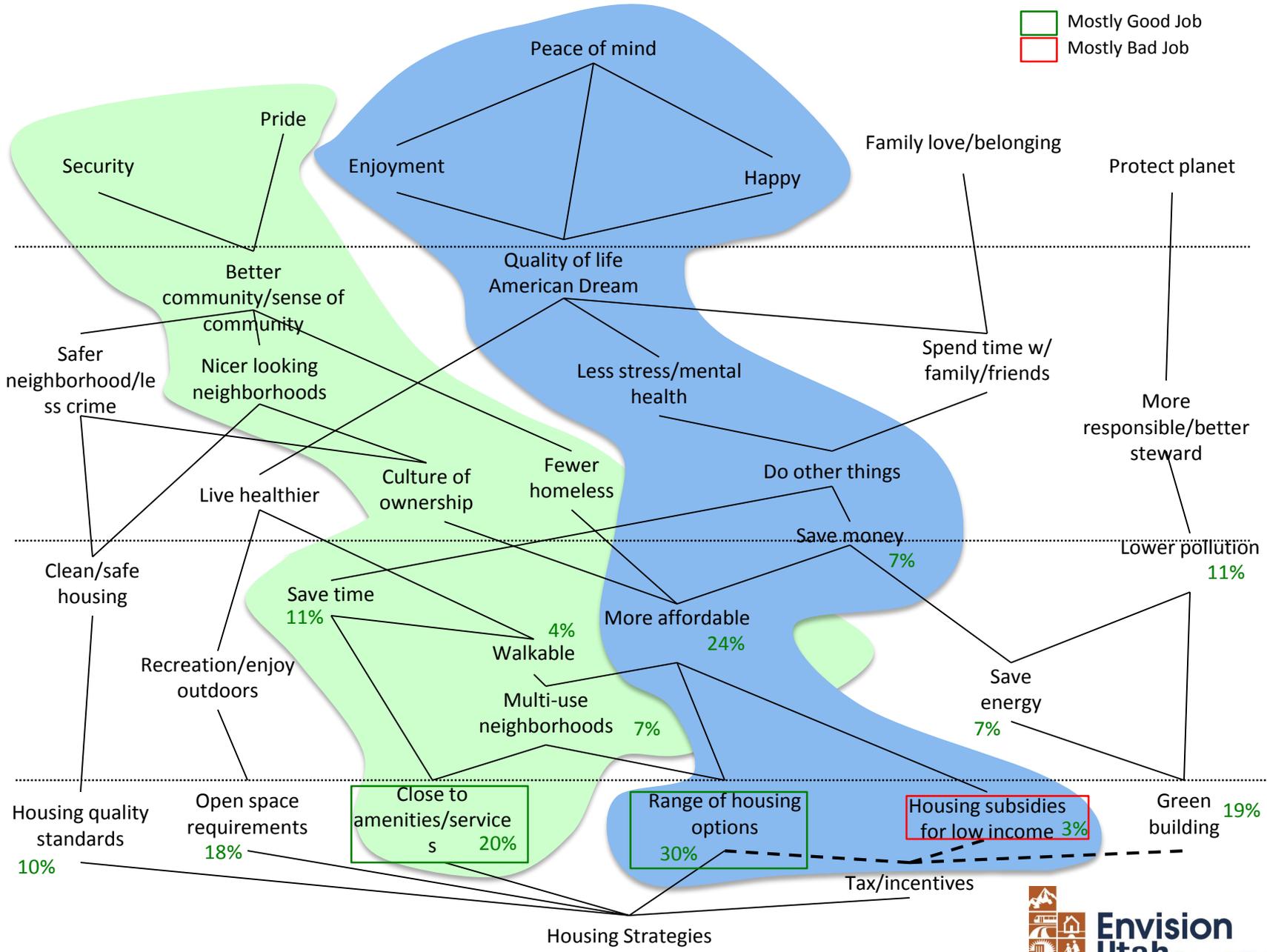
Attributes



Housing: Pathways

- Dominant Pathway
- Secondary Pathway
- Mostly Good Job
- Mostly Bad Job

- Personal Values
- Psychosocial Consequences
- Functional Consequences
- Attributes



Housing: Rural Distinction

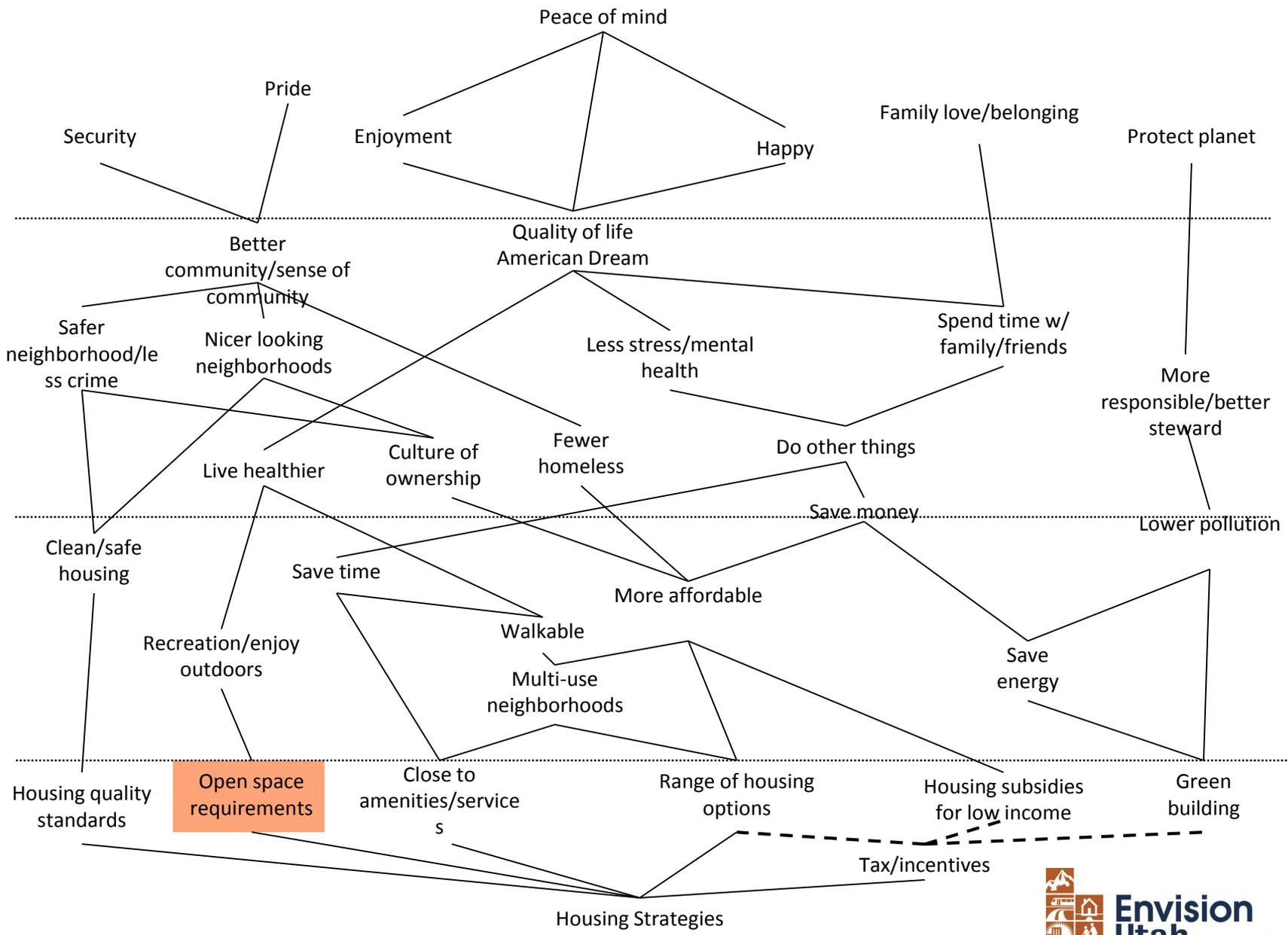
More Important to Rural/Semi-Rural Residents

Personal Values

Psychosocial Consequences

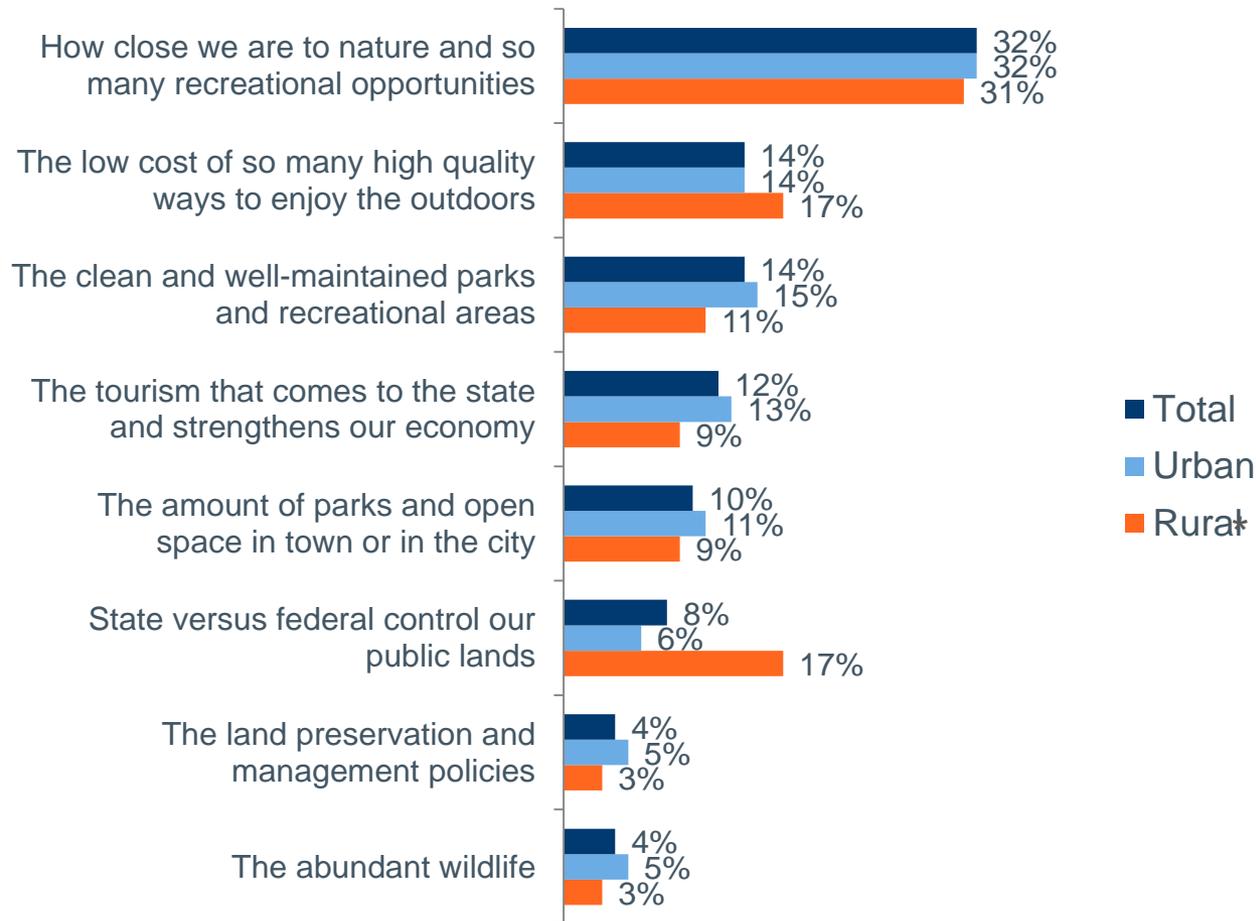
Functional Consequences

Attributes



When it comes to outdoor recreation, most Utahns agree that the proximity to nature is the most impactful element.

Outdoor Recreation

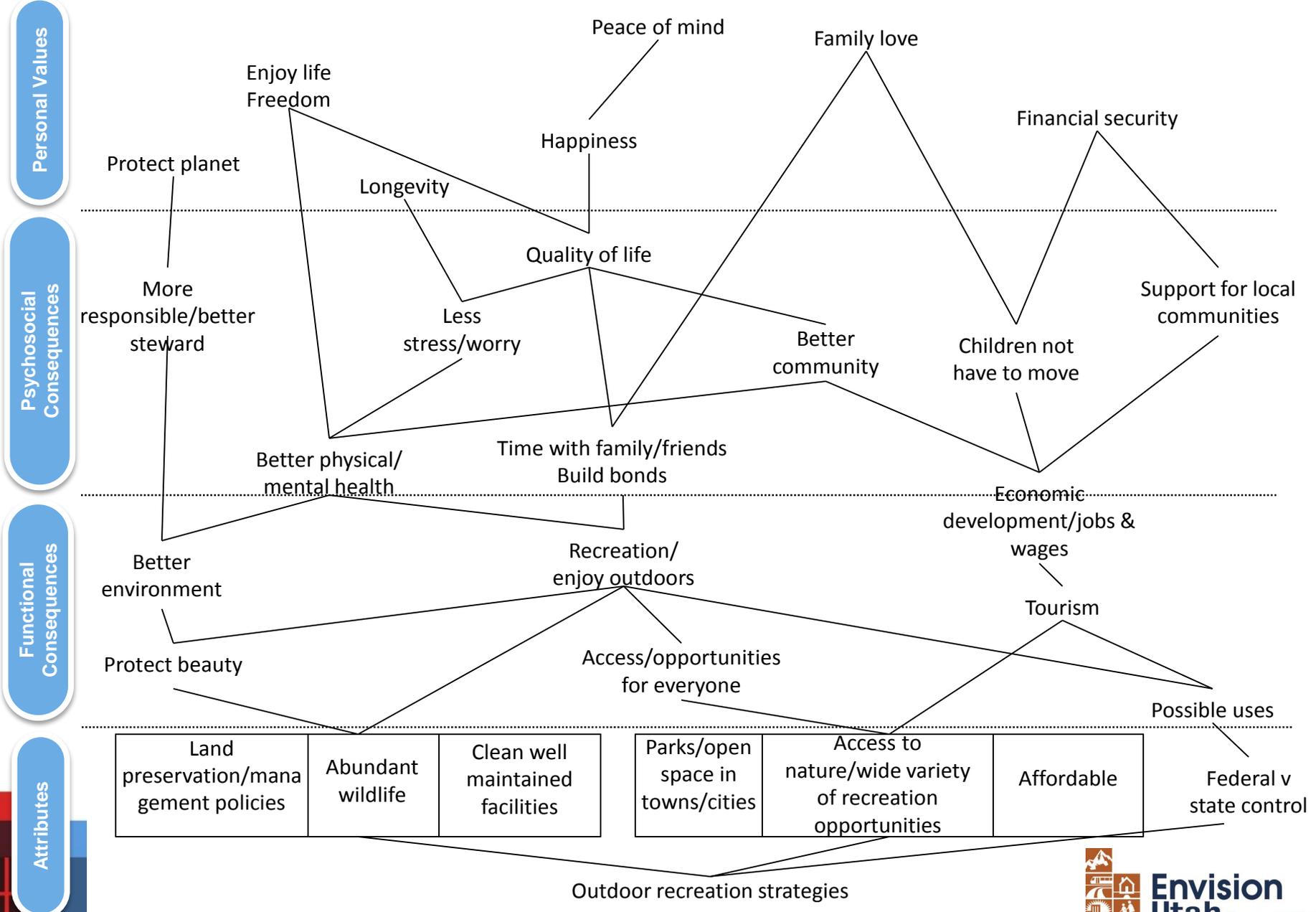


* Note: Extremely small base size. Results should be viewed as directional. Rural is comprised of Semi-Rural and Rural residents.

BASE: ALL QUALIFIED RESPONDENTS (N=166)

Q590. When it comes to outdoor recreation, which of the following do you feel would have the biggest impact on you and your family personally?

Outdoor Recreation: Map



Personal Values

Psychosocial Consequences

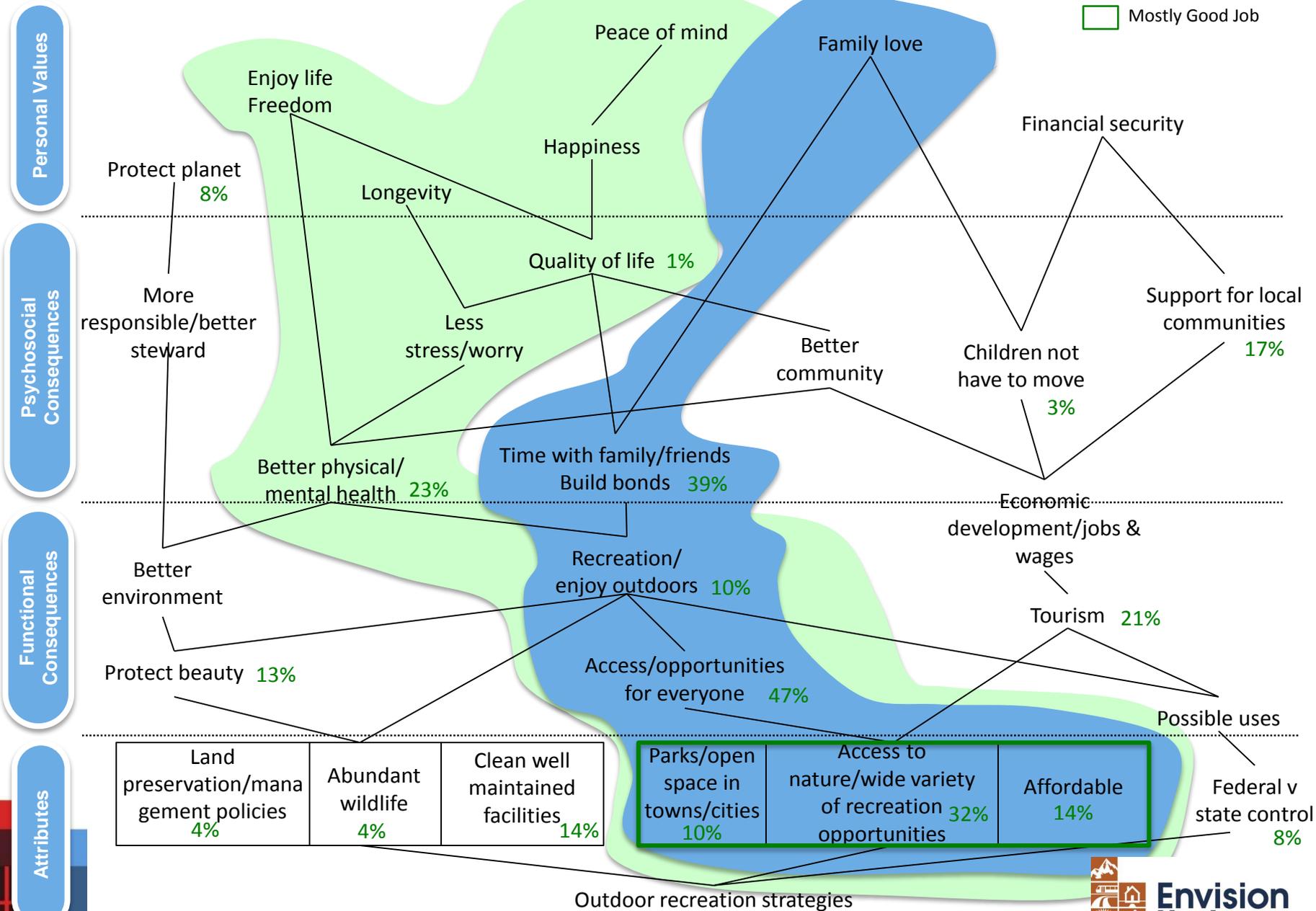
Functional Consequences

Attributes

Outdoor recreation strategies

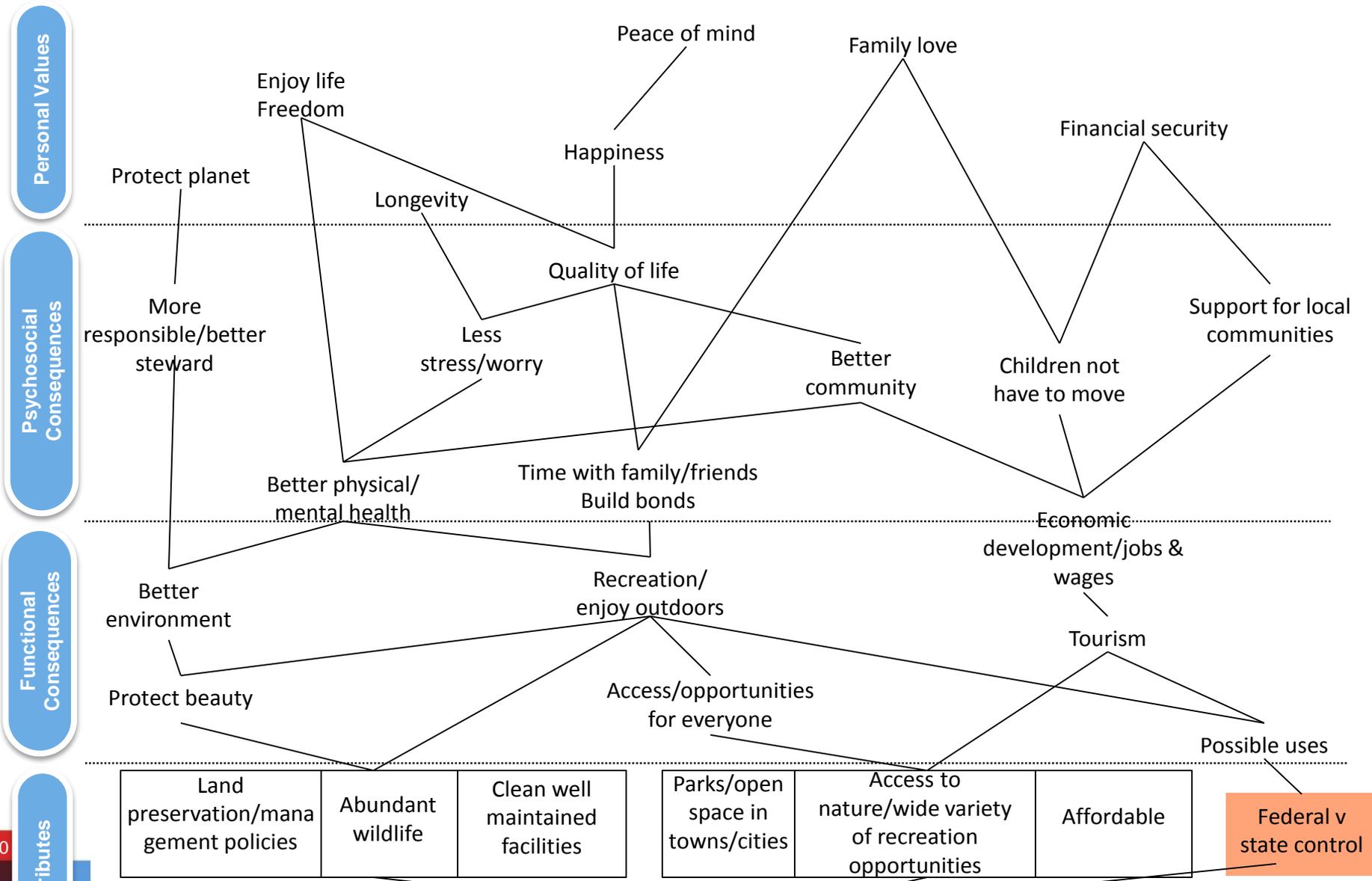
Outdoor Recreation: Pathways

■ Dominant Pathway
■ Secondary Pathway
 Mostly Good Job



Outdoor Recreation: Rural Distinction

 More Important to Rural/Semi-Rural Residents



Outdoor recreation strategies

Detailed Findings

HOUSING AND AGRICULTURE MESSAGE TESTING

The most compelling reason for different housing options involves making it possible for those who work in the community to afford to live there. Better air quality due to close proximity and less traffic congestion also top the list.

■ Not At All Compelling ■ Not Very Compelling ■ Somewhat Compelling ■ Extremely Compelling

Rural/Semi-Rural residents (91%) find this more compelling than Urban residents (86%).

Makes it possible for teachers, firefighters, police officers, and other people who work in the community to afford to live there.



Makes it easier to live close to work, shopping, and other destinations, which leads to better air quality and less traffic congestion.



Makes it so that people with lower incomes...don't all have to live in lower-income areas where schools struggle and it's hard to escape intergenerational poverty.



Rural/Semi-Rural residents (88%) find this more compelling than Urban residents (77%).

Makes it easier to attract business and jobs because employers can find workers for all pay scales nearby.



Makes it easier for young people who are just getting their start in life to live close to their parents or other family members.



Makes it possible for more people, and particularly children, to experience interacting with a diversity of incomes and ethnicities.

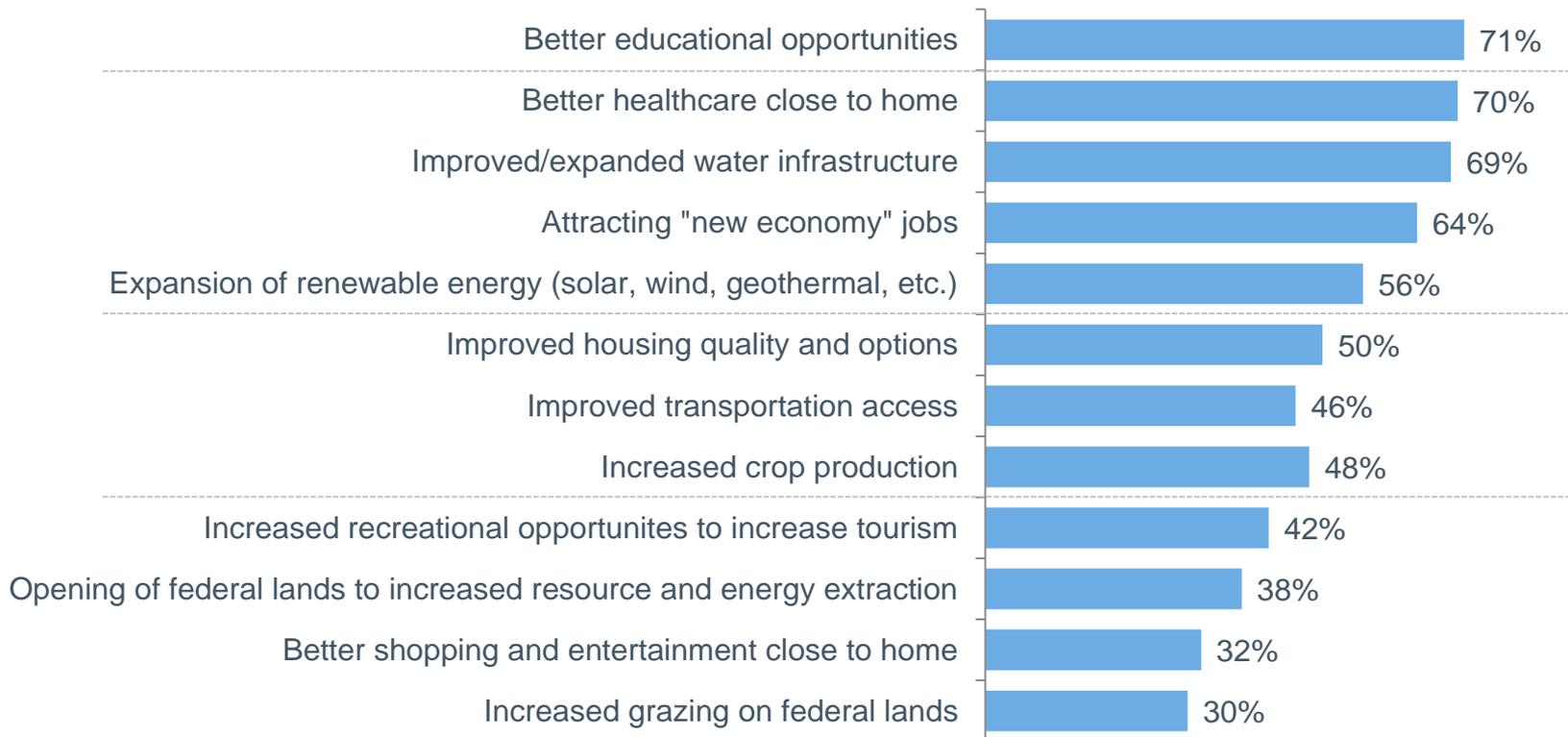


BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q700. There are different reasons why people like to have a variety of housing types (e.g. single family homes, townhomes, apartments) in a community. Please indicate how compelling each reason is.

Better educational opportunities, healthcare close to home and improved/expanded water infrastructure are the most important items identified for the planning of growth in Rural Utah.

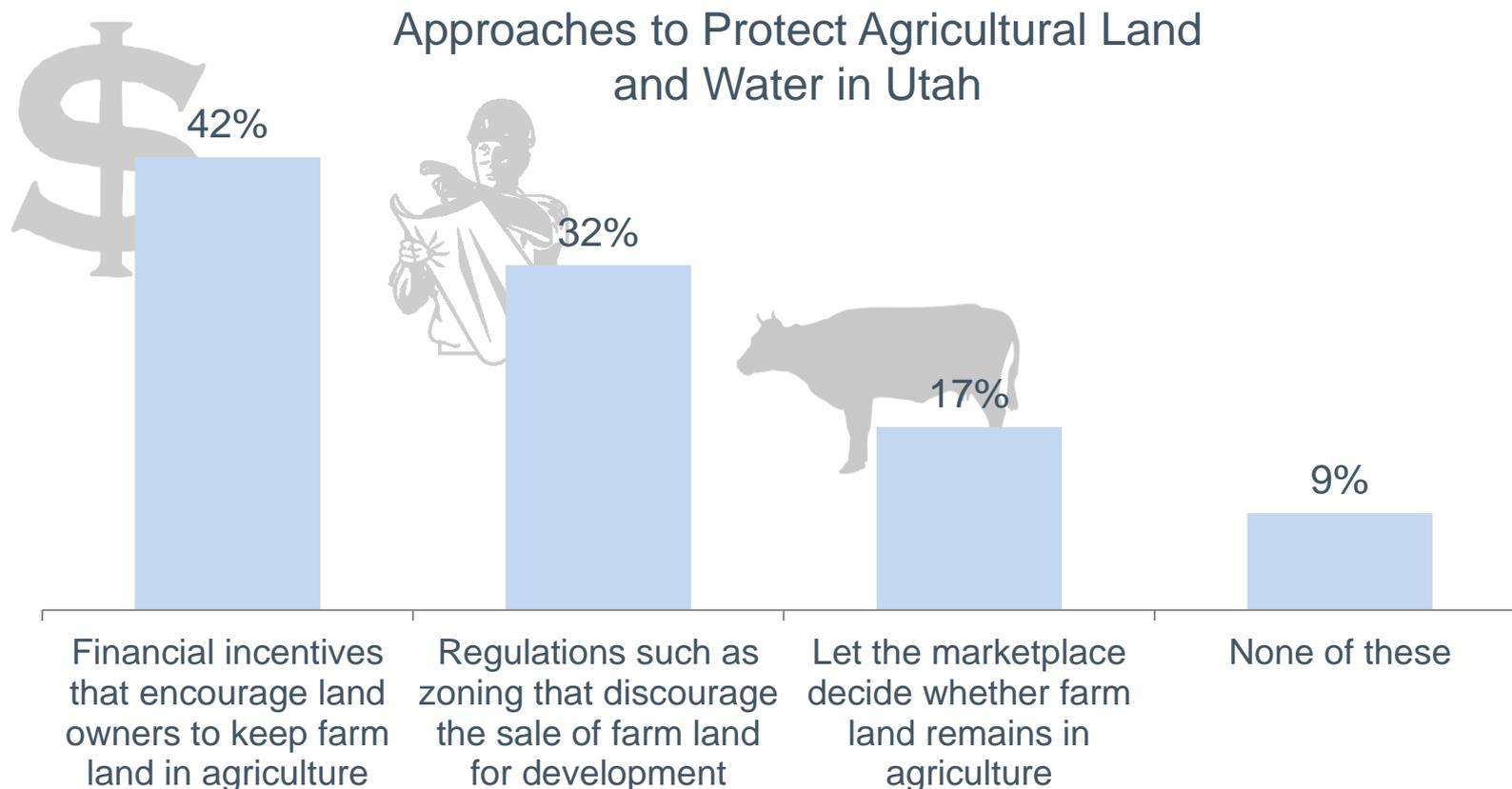
Top 2 Box Importance (Rated 4 or 5 on 5 pt. scale) Among Rural/Semi-Rural Residents



BASE: ALL QUALIFIED RESPONDENTS (Rural N=200)

Q705. The following are several strategies that may or may not be important for the planning of growth and improvement of quality of life for rural Utah areas. Please rate the importance of each of the following approaches.

Most Utahns believe that financial incentives are the best approach to protect agricultural land and water in the state.



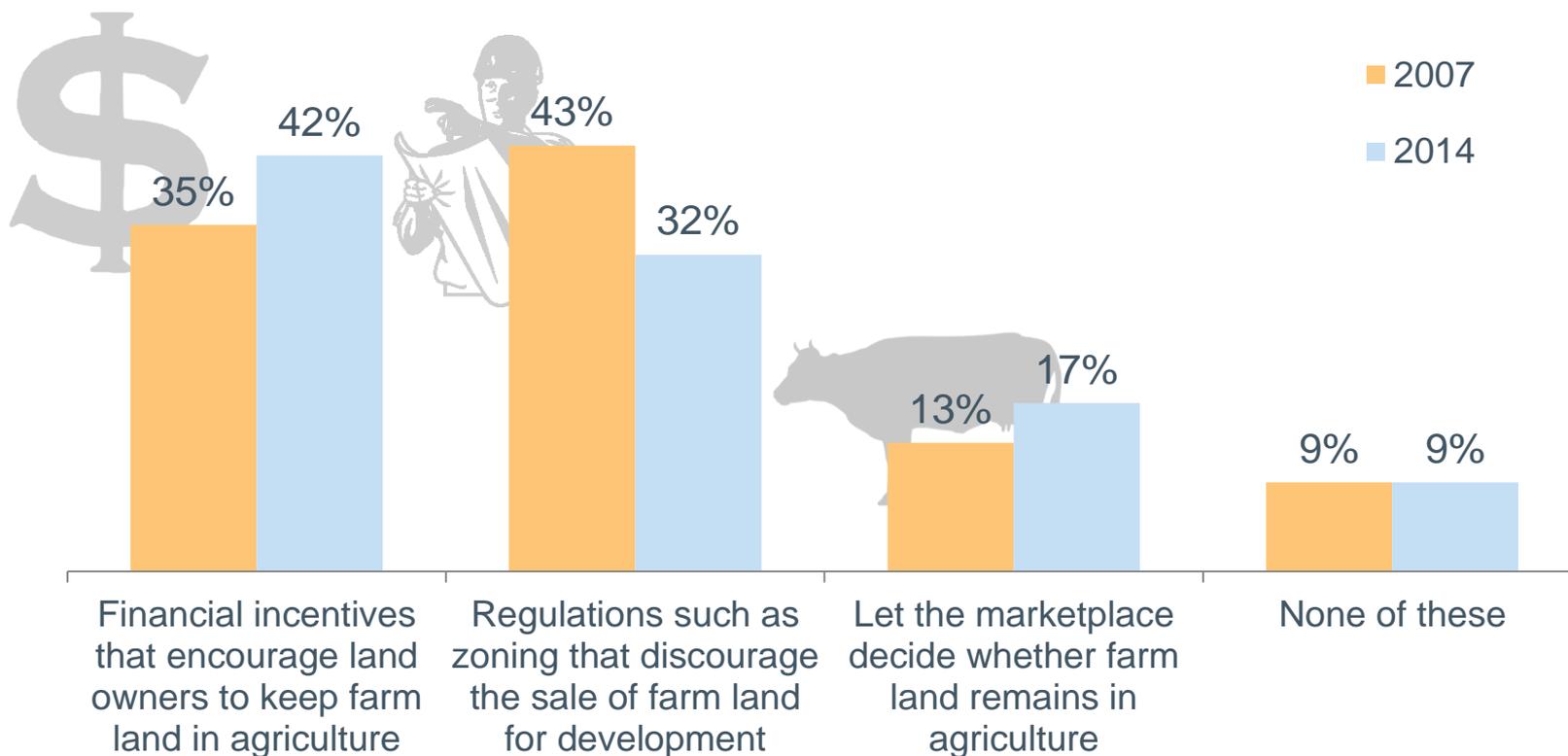
Rural/Semi-Rural residents (22%) are more likely to let the marketplace decide whether farm land remains agriculture than Urban residents (16%).

BASE: ALL QUALIFIED RESPONDENTS (N=1000)

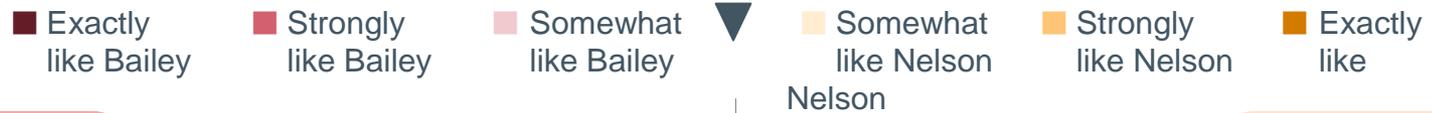
Q710. Which of the following basic approaches should be used to protect agricultural land and water in Utah?

Perspectives shift in 2014, focusing on financial incentives instead of regulations.

Approaches to Protect Agricultural Land and Water in Utah

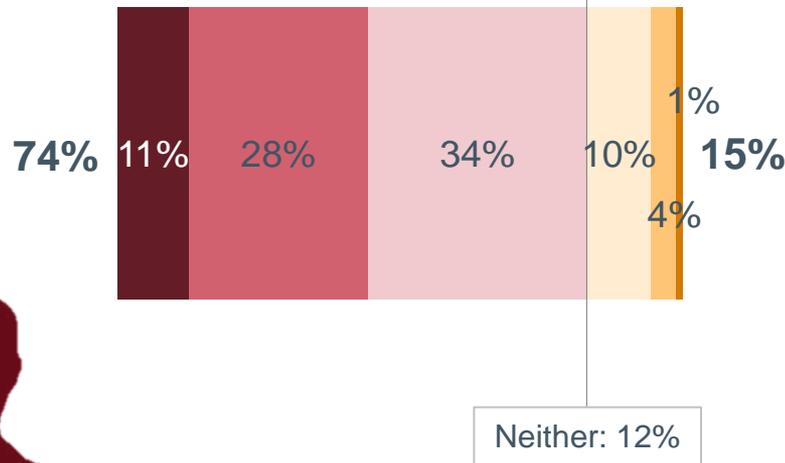


Three quarters of Utahns agree that farming and ranching are critical to the state.



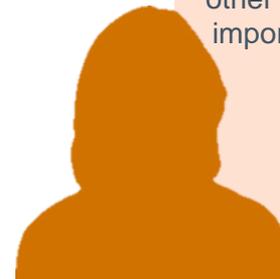
Bailey

believes that **farming and ranching are critical** to the future of Utah and help to maintain the land and values that are so important to making Utah a great place to live.

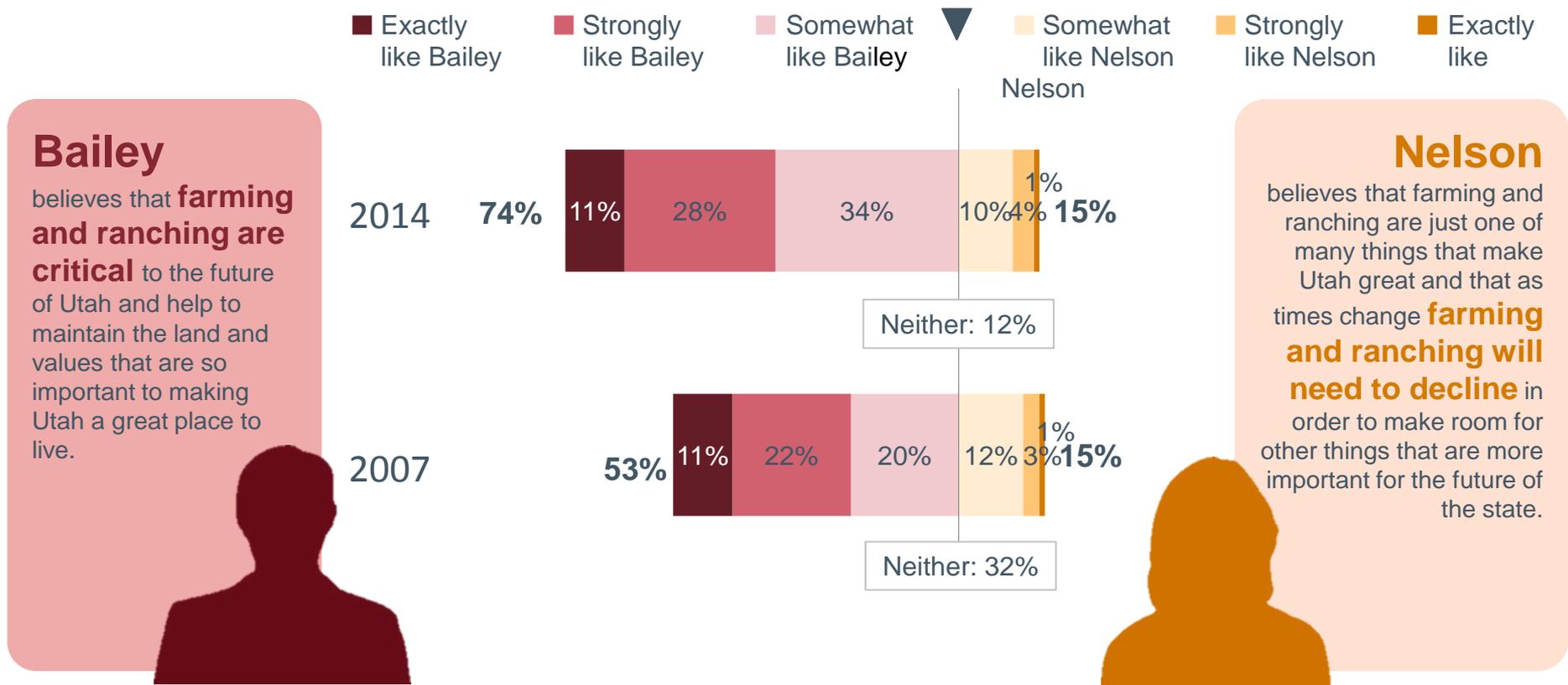


Nelson

believes that farming and ranching are just one of many things that make Utah great and that as times change **farming and ranching will need to decline** in order to make room for other things that are more important for the future of the state.

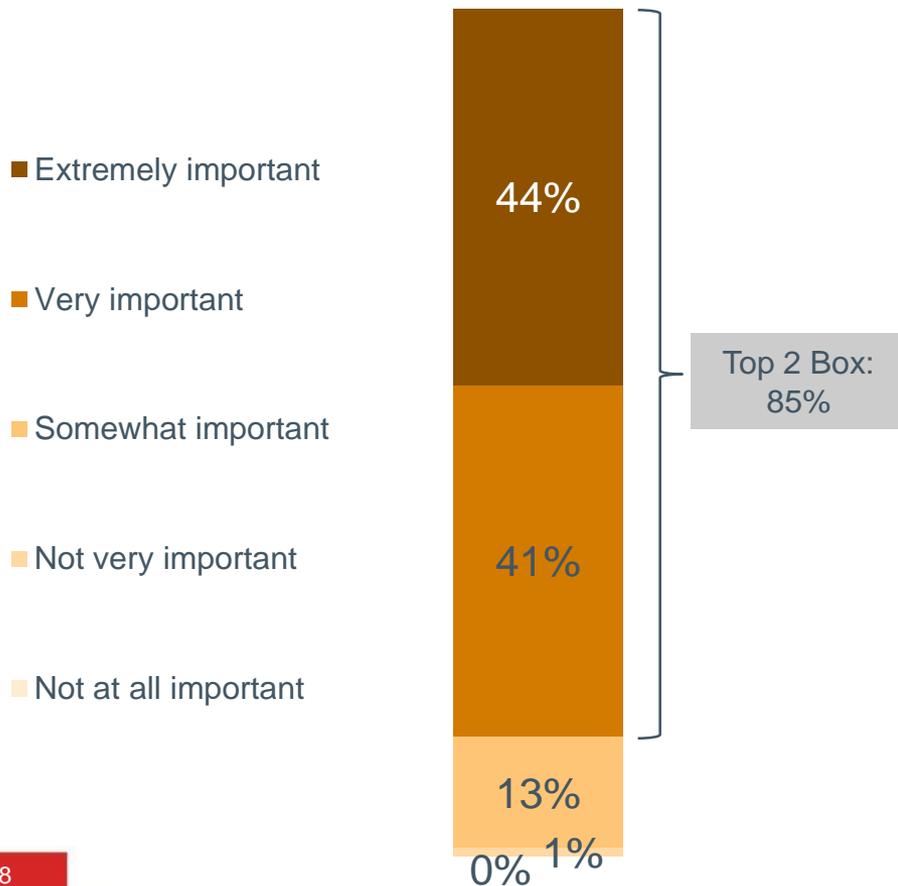


In 2007, almost a third of Utahns did not have a strong opinion about farming and ranching. However, an increasing number agree that it is critical.

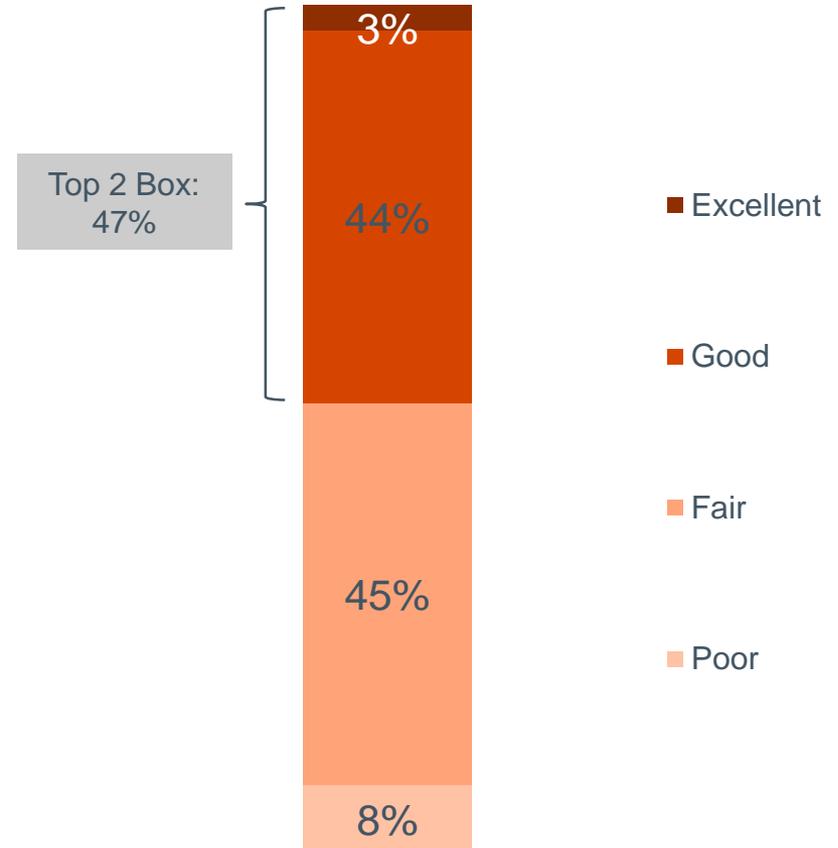


A majority agree that Utah's vision for the future is important. Only half feel the state's performance in planning for the future is excellent or good.

Importance of Utah's Vision for the Future



Utah's Performance in Planning for Future Growth



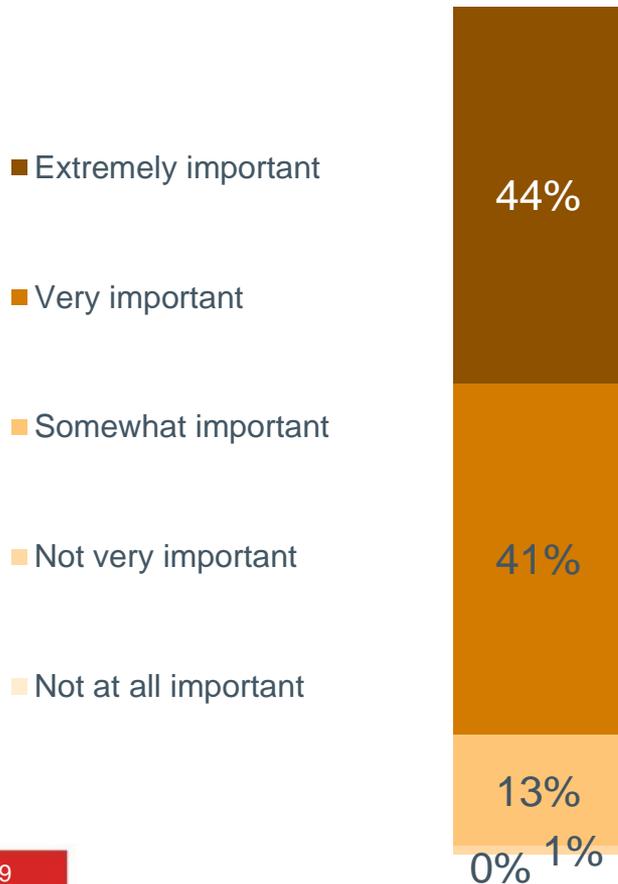
BASE: ALL QUALIFIED RESPONDENTS (N=1000)

Q725. How important is it that Utah has a vision or a long range plan for the state?

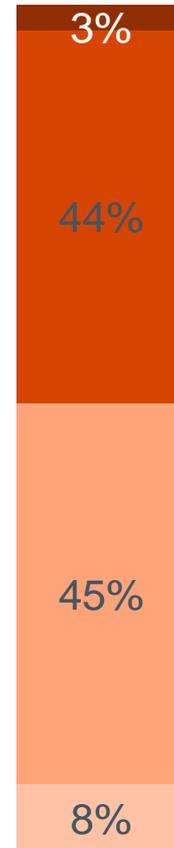
Q730. How would you rate the performance of the state when it comes to planning and preparing for growth in the state?

A majority agree that Utah's vision for the future is important. Only half feel the state's performance in planning for the future is excellent or good.

Importance of Utah's Vision for the Future



Utah's Performance in Planning for Future Growth

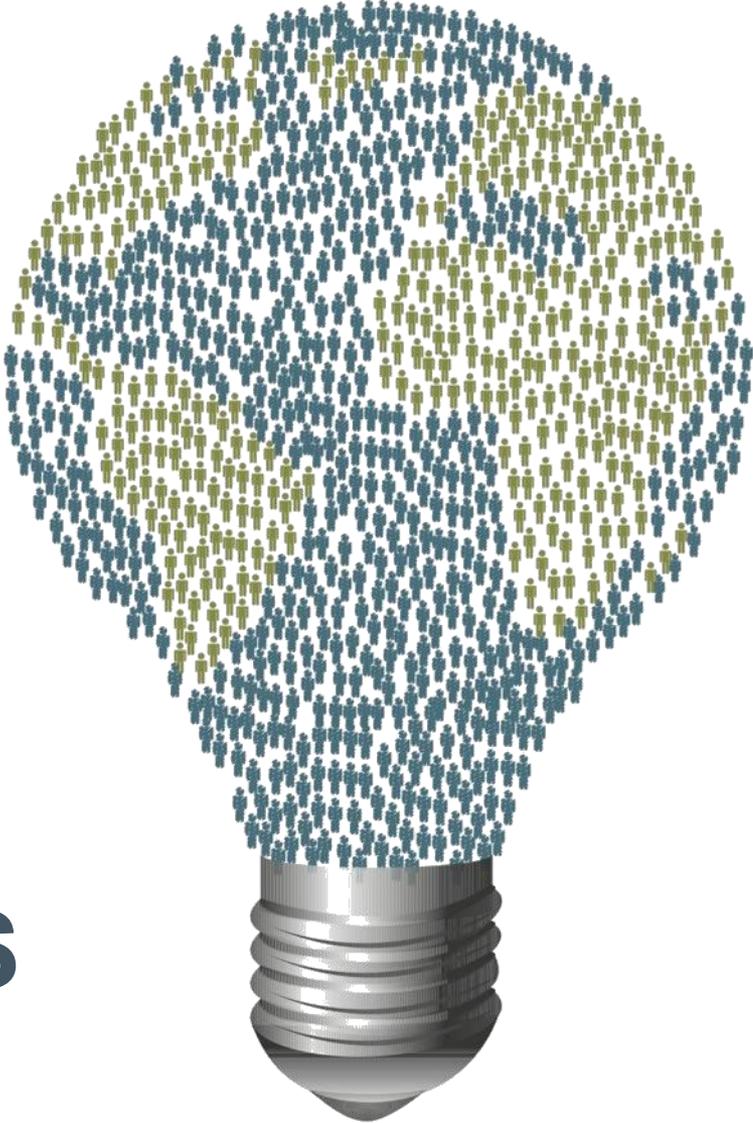


	<u>Orlando</u>	<u>Omaha</u>
■ Excellent	2%	4%
■ Good	35%	54%
■ Fair	49%	38%
■ Poor	13%	5%

BASE: ALL QUALIFIED RESPONDENTS (N=1000)

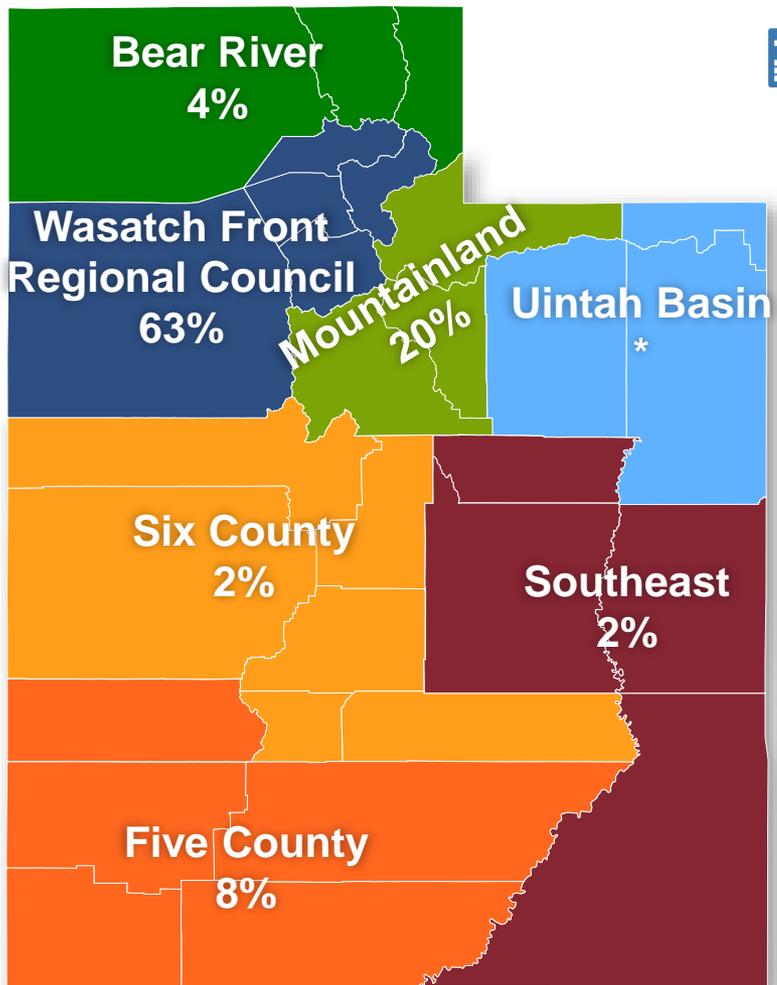
Q725. How important is it that Utah has a vision or a long range plan for the state?

Q730. How would you rate the performance of the state when it comes to planning and preparing for growth in the state?



DEMOGRAPHICS

Resident Profile



No. of Years Lived in Region

Less than 3 years	4%
3-5 years	6%
6-10 years	12%
11-20 years	16%
21-30 years	21%
More than 30 years	41%



Type of Area Live in

An urban or city area	23%
A suburban area next to a city	49%
A small town/small city	22%
A rural area/very few neighbors	5%

Type of Home Currently Live In

Detached single family home with a small yard	16%
Detached single family home with a medium yard	42%
Detached single family home with a large yard	19%
An attached town home	5%
Duplex	2%
A condominium unit	6%
A rental apartment unit	8%
Mobile home on a large lot	-
Mobile home	1%
Other	1%
Decline to answer	-

Currently Own or Rent Home

Own	71%
Rent	24%
Other	4%
Decline to answer	1%

Resident Profile



Gender

Male	46%
Female	54%



Ethnic Background

Hispanic	10%
White, non-Hispanic	85%
Black, non-Hispanic	-
Asian, non-Hispanic	2%
American Indian or Alaskan Native, non-Hispanic	-
Native Hawaiian or Other Pacific Islander, non-Hispanic	-
Multi-race, non-Hispanic	1%
All other, non-Hispanic	-



Age

18-24	7%
25-34	25%
35-44	18%
45-54	17%
55-64	16%
65+	17%



Education

Less than high school	1%
High school graduate/GED	6%
Some college, but no degree	27%
College graduate	43%
Post-graduate	22%
Decline to answer	1%



Employment Status

Employed full-time	57%
Employed part-time	15%
Full-time student	1%
Homemaker	7%
Retired	16%
Unemployed	2%
Disabled	2%
Decline to answer	-



Marital Status

Single, never married	16%
Married	68%
Divorced	7%
Separated	1%
Widow/Widower	1%
Engaged to be married	1%
Living with partner	5%
Decline to answer	1%



Total Annual Household Income Before Taxes In 2013

Less than \$10,000	1%
\$10,000 but less than \$20,000	4%
\$20,000 but less than \$30,000	9%
\$30,000 but less than \$40,000	9%
\$40,000 but less than \$50,000	9%
\$50,000 but less than \$60,000	10%
\$60,000 but less than \$70,000	12%
Over \$70,000	38%
Decline to answer	8%



Children in Household

None	32%
Under 5 years	16%
5-9 years	13%
10-12 years	10%
13-15 years	8%
16-18 years	8%
Over 18 years	39%
Decline to answer	1%



Exhibit 3: TrendLab Meeting Summary (May 20th, 2015)



Presented To:

**Wasatch Front Central Corridor
Study Management Team**

Presented By:

**Wasatch Front Central Corridor
Study Technical Team**



TrendLab Summary Technical Memorandum

June 30, 2015





TECHNICAL MEMORANDUM

To: Wasatch Front Central Corridor Study Management Team

From: Wasatch Front Central Corridor Study Technical Team

Date: June 30, 2015

Introduction

This memorandum provides a summary of the activities that took place during the TrendLab workshop for the Wasatch Front Central Corridor Study on May 20th, 2015 at the Utah State Library for the Blind and Disabled. The meeting agenda included:

- A brief overview of the project and purpose of the workshop;
- Review of historical transportation trends as compared to current and projected trends, including a summary of participants' responses to the TrendLab survey issued prior to the meeting;
- Panel presentations by industry experts on land use/transportation integration, active transportation, disruptive trends, congestion pricing, and transportation financing;
- Debate groups where participants discussed demographic, economic, and technological trends and how they could affect transportation in Utah; and
- A map-based exercise in which participants could identify what they wanted to avoid, create or protect along the areas of the Wasatch Front.

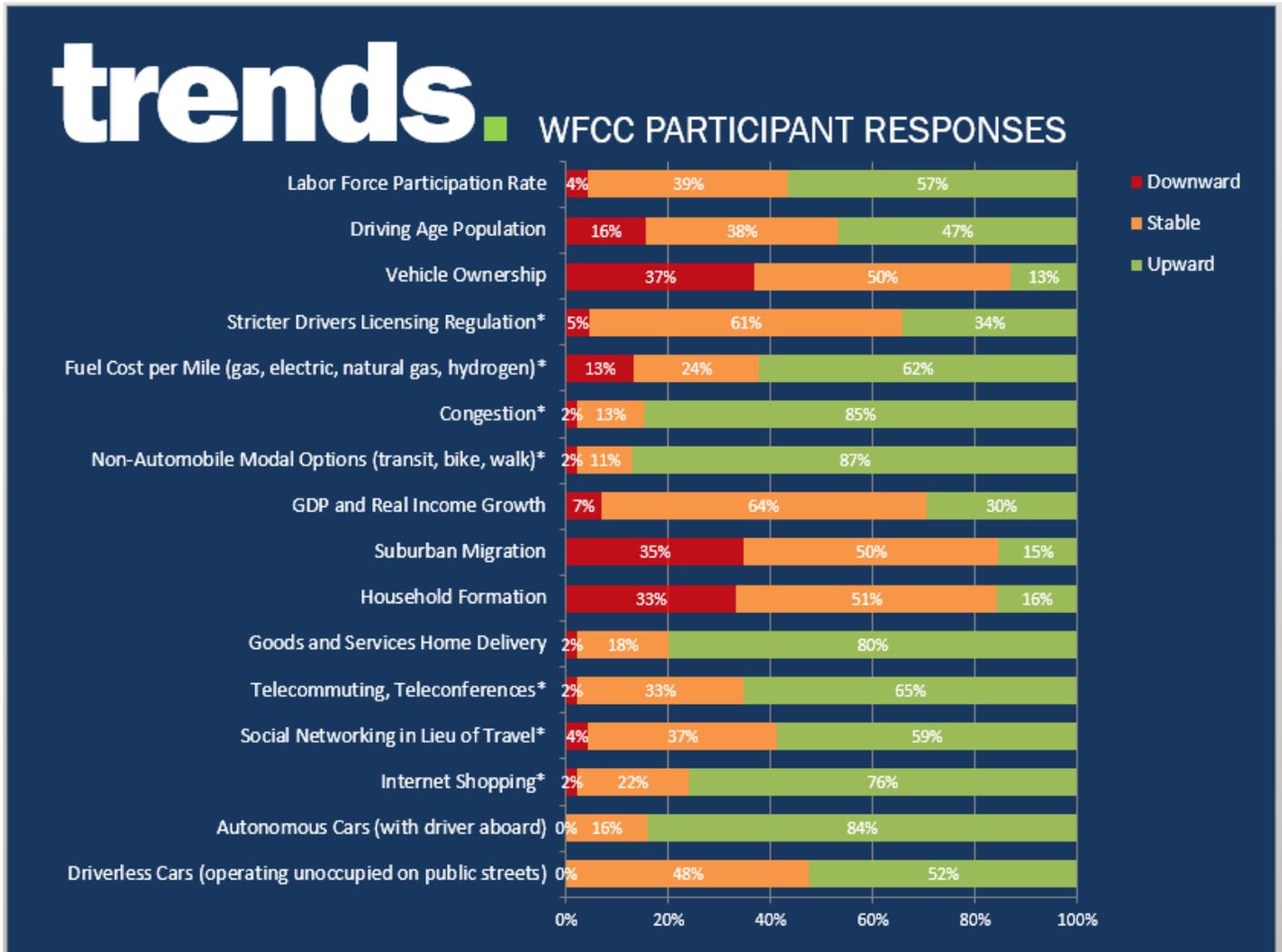
This memorandum summarizes key takeaways and outlines how the feedback received at the workshop will be utilized by the project team. This memorandum also provides documentation on attendees, panel presentations, breakout group discussions, and comments received on maps.

Key Takeaways

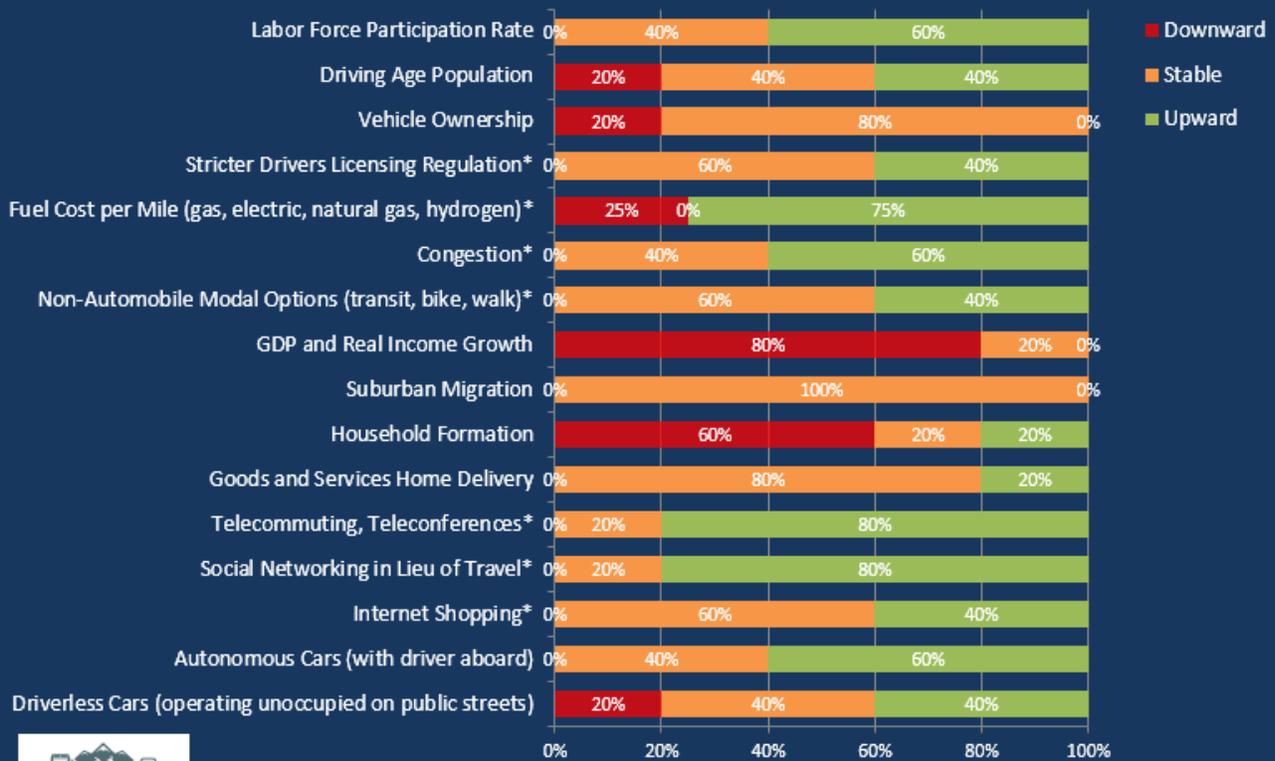
Three portions of the meeting allowed participants to provide feedback on the future of transportation along the Wasatch Front: the TrendLab+ exercise, debate groups, and the map exercise. Feedback received during these sessions is summarized below.

TrendLab+ Exercise

Meeting participants and industry experts were surveyed on 16 trends that are expected to influence future travel especially related to vehicle use. The results for each group are presented below followed by how the responses directly corresponded to long-term changes in vehicle miles of travel (VMT) per capita.



trends ■ WFCC EXPERT RESPONSES



Notable differences were found in comparing the participant responses with those of industry experts for the following trends.

- **Congestion** – Participants expect more congestion than the experts, which could be tied to more robust population, employment and economic growth in Utah (see similar findings below)
- **Non-Automobile Modal Options** – With growing congestion, participants seemed to also make the connection to increases in transit, walking, and bicycling beyond levels anticipated by the experts.
- **GDP and Real Income Growth** – Participants considered this trend stable while the experts were most pessimistic. This difference was explored in some of the group discussions as well (see later section for details) and it was clear that economic conditions in Utah do not follow national trends.
- **Suburban Migration** – Participants expected this trend to be stable across all respondents. The experts were more mixed.
- **Goods and Services Home Delivery/Internet Shopping** – Participants did not see as much change as the experts.

The differences between the experts and participants did not reveal dramatically different VMT per capita forecasts. The economic optimism of participants did contribute to a slightly higher VMT per capita forecast compared to a slight downward trend for the experts. In general, both forecasts showed relative stability in current levels of VMT per capita. This finding suggests that travel forecasting for this study is unlikely to require substantial changes to the models proposed to be used for this study.

trends

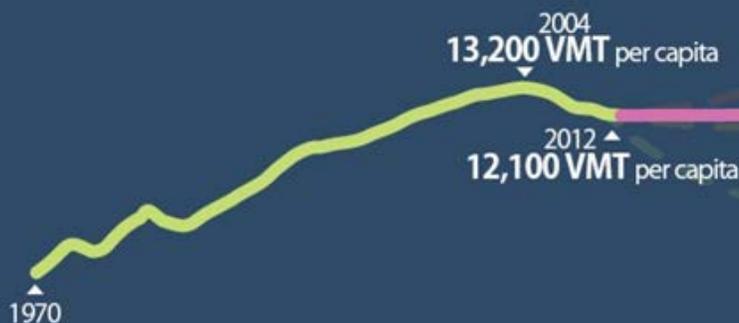
WFCC PARTICIPANT RESULTS

Your Forecast

2040	2060*
12,080	13,273

2040 Published Forecasts

- 17,100 VMT per capita
U.S. DOT
- 16,300 VMT per capita
Transportation Financing Commission
- 13,400 VMT per capita
U.S. Energy Administration
- 12,200 VMT per capita
Public Interest Research Group: High
- 8,200 VMT per capita
Public Interest Research Group: Low



trends

WFCC EXPERT RESULTS



Panel Presentations - Key Points

- Active Transportation:
 - Current active transportation mode share in the Wasatch Front is 7.8% pedestrian, 1.7% cyclists.
 - Active transportation mode share could be affected in either direction, depending on how we proceed:
 - No change or decrease if:
 - No major investments are made in AT infrastructure.
 - As congestion on roadways increases, some AT infrastructure is removed to accommodate more travel lanes.
 - No effort is made to build comfortable AT infrastructure, and bike lanes are the most innovative treatment applied.
 - Density does not increase.
 - Land use does not become more diverse.
 - Distances between origins and destinations continue to be longer than what is convenient for walking or bicycling.
 - Large increase in mode share if:
 - Federal, state, and local funding sources increasingly prioritize and invest in AT projects.

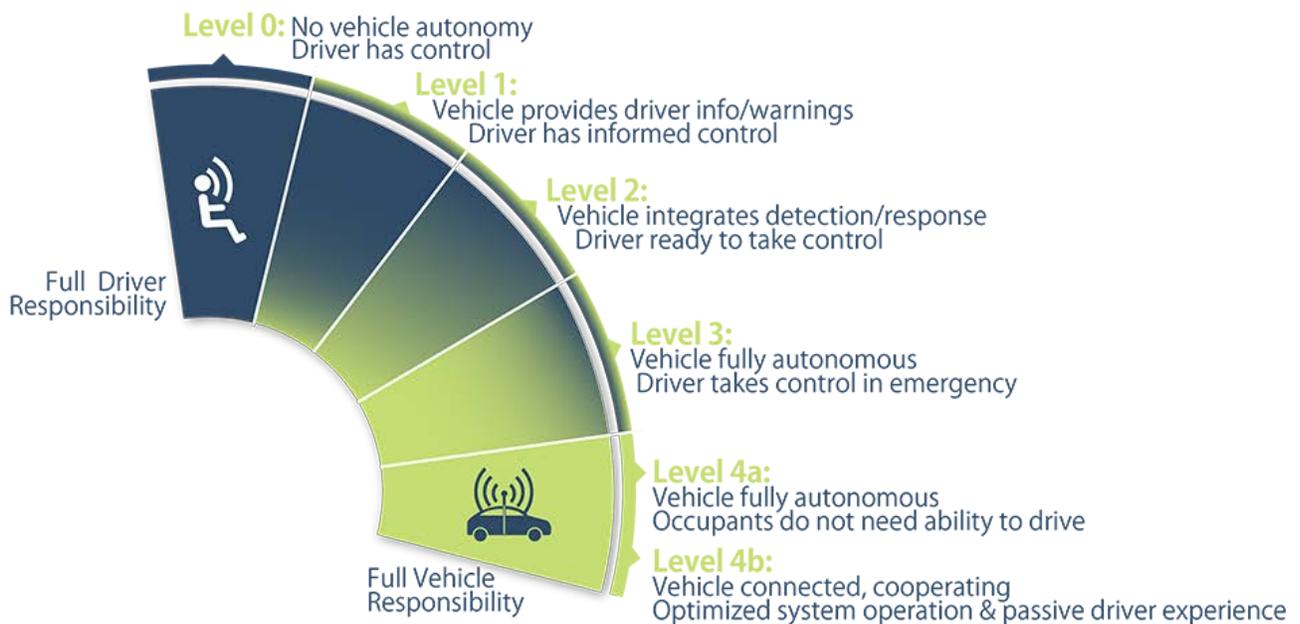
- High levels of congestion on certain roadways are accepted by policy makers as a tradeoff for high-quality AT infrastructure.
- Bikeway implementation is focused on those which will draw the majority of the population, the “Interested but Concerned”, who outnumber confident bicyclists 4:1.
- Density increases, via infill development or redevelopment of underutilized land.
- Land use becomes more diverse.
- Distances between origins and destinations become shorter and convenient for walking and bicycling.
- Prediction: active transportation mode share on the Wasatch Front could be 15% by 2040.
- Region should: leverage transit investment through complementary land use. Introduce “life oriented” development: projects that include services such as grocery stores, health care, and schools within walking and biking distance and near transit.
- Land Use/Transportation, Lessons learned from Atlanta
 - Georgia Regional Transportation Authority – has review and approval authority over projects of a certain scale (400+ homes, 400K+ office, 300K+ retail, 500+ industrial, 1600+ employees, 400+ acres). GRTA can apply conditions of approval including preservation of ROW, intersection upgrades, sidewalks, access control, internal circulation, and improved access to transit. GRTA has reviewed 400 projects since 2000. Potential applicability: State could take a more direct role coordinating between land use and transportation, establishing development requirements to be addressed by local governments and developers, or require TDM measures. Challenges: difficult to implement the strictest regularly measures, and makes development more costly.
 - Livable Centers Initiative: similar to WFRC LPRP program, and also prioritizes infrastructure funding to local communities who are identified as a Center/Corridor by the MPO and have completed livability plans. Lessons learned: definition of centers has been diluted over time; program has a lot of support, but some centers are not really transit accessible; local governments want the funding but sometimes struggle to deliver projects, provide a local match, or meet federal requirements.
 - Atlanta BeltLine: Single agency leading a \$4.5B mobility and economic development program to implement 22 miles of LRT/streetcar, 5000+ housing units, 6500 acres of development district, and 1300 green

space. Applicability: Utah could create an I-15 district agency that was responsible for oversight and management of the various corridors to meet regional multimodal goals. Lessons learned: a diverse/dedicated funding source is needed; roles need to be clearly defined; treat the corridor as a place for people in addition to a transportation facility.

- Congestion Pricing/Integrated Corridor Management
 - Being applied in I-405 Corridor, from Tukwilla to Lynnwood in Seattle area, combining roadway pricing, transit improvements, TDM strategies, active traffic management, and traveler information; shifting demand from freeway to parallel facilities where capacity is available.
 - Also applied on I-15 corridor in San Diego, utilizing managed lanes, drop ramps, park-and-ride, arterial access, and transit improvements, in a multi-modal multi-agency cooperative effort.
- Transportation Financing
 - Trends affecting transportation financing nationally include no changes in excise taxes, slow VMT growth, inflation, and increasing fuel economy. While 11 states have enacted gas tax increases since 2013, including Utah in 2015, many states (24) have not increased their gas tax in 10 years and others (16) have not increased their gas tax in 20 years.
 - Loss of purchasing power through fuel economy and inflation leads to a 72% reduction in purchasing power by 2035.
 - Cities and states looking to multiple funding solutions, including local fuel excise tax increases, mileage-based fees (Oregon, Colorado, Washing State, California, etc), increased local funding, and P3 financing.
 - WFCCS should focus on evaluating wider transportation benefits such as reliability, accessibility, and intermodal connectivity



- Automated vs autonomous: automated requires driver activity but system executes actions such as lane changes, braking, parking; autonomous requires no driver activity at all.
- Effect of autonomous vehicles on capacity:
 - 50% autonomous fleet mix = 20-30% capacity increase
 - 75% autonomous fleet mix = 30-40% capacity increase
 - 95% autonomous fleet mix = 50-100% capacity increase
- Questions for planners to consider:
 - Will we need less infrastructure for safety issues (ie, breakdown lanes, VMS)?
 - Will we need less road capacity?
 - Will the loss of driver independence translate to a better experience?
 - How much investment would be required?



Debate Group Discussions

Debate groups were assigned specific trends and were generally asked to discuss how these trends would/would not take shape on the Wasatch Front. Below is a summary of what participants believed would change or not change in the future.

- What remains the same?
 - Utah will still be a car-centric state, for multiple reasons. The car-free trend will not take hold here.
 - We should expect our high rates of economic and population growth to continue.
 - Utahans believe in the freedom to choose how they get around, where they live, etc. People will still follow the “drive until you qualify” approach and be willing to drive 40-60 minutes to reach the housing they can afford. The “carrot” approach could be effective here, but a “stick” approach will not.
 - Social media won’t lead to a decrease in face-to-face interactions.
 - It will be hard to shift commuters away from SOV travel, but a change in land use patterns could help.
 - Participants expressed relatively minimal support for congestion pricing strategies, despite its demonstrated effectiveness elsewhere. Participants acknowledged that the current system is used ineffectively and that air quality is a big problem, but shy away from the “stick” approach.

- What changes should we expect?
 - Participants expressed wariness about uncertainty in future forecasts, and the preponderance of trends that could affect future travel demand. They appreciated UDOT’s willingness to try new approaches to transportation problems (sometimes applying solutions that have not been widely used in the US).
 - Excitement is high around autonomous vehicles. There is a great deal of interest among agency staff in how this is going to play out. Participants agreed that it will become reality soon, but were divided on how soon and to what degree autonomous vehicles would permeate the fleet.
 - Participants expressed a need for better cycling facilities.
 - Greater confidence and reliability across travel modes was important to participants.
 - The funding paradigm for roadways looks great in the near future, but the transit funding picture is less rosy.
 - Changes in freight delivery at the local level could affect travel demand, by shifting deliveries to another mode (ie, drones) or time of day.



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I cover Europe's car manufacturers, their business, tech, products full bio →

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AUTOS 6/6/2014 @ 1:23PM | 183 views

Autonomous Cars Like The Google May Be Viable In Less Than 10 Years

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BRUSSELS, Belgium – President Barack Obama’s motorcade, abetted by the limousine cavalcades of his G7 leader colleagues and non-stop rain, bought traffic to a standstill here this week, making those stranded in their cars or diving into the underground railroad system for relief wonder whether computer controlled cars might one day make this aggravation a thing of the past.

News of [Google](#) GOOGL -0.18%’s autonomous car, which can transport two passengers around at speeds of up to 25 mph with the computer controlling the steering wheel and brakes, has set off speculation about just when this technology will be available.

Could it be with us in less than 10 years?

“Yes,” says Peter Fuss, Germany based automotive specialist from the EY consultancy.

Fuss told the annual Automotive News Congress here that so-called autonomous driving will arrive in less than 10 years, spurred on by safety and comfort benefits.

“No,” said other assorted experts at the conference, led by Volvo, who reckoned 10 to 15 years was more likely.

Discounts

Start S

Drive Safe & Save



Oracle Voice: Modern HR Or How To Earn Your Employees Every Day

Oracle Guest





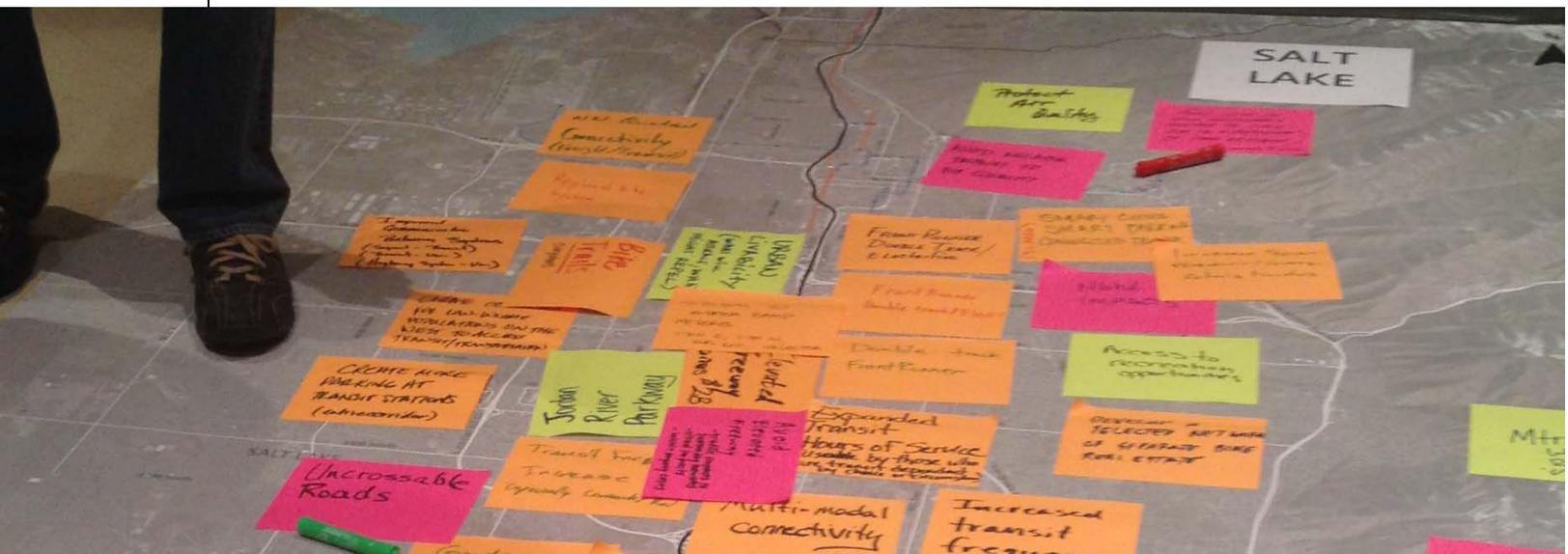
Map Exercise: Avoid, Create, Protect

Map comments were received via “Post-It” notes placed on maps, which the project team then digitized and used to create a database. Some common themes emerged from the 88 comments that were received.

- Meeting participants were interested in creating freeway projects that enhance accessibility in the I-15 corridor. These included ideas such as :
 - Upgrading interchanges (5600 South in Layton accessing Hill Field Road, I-15/I-215 interchange access to Legacy Parkway)
 - New interchanges (between US-89 split and 200 North in Kaysville, or a new HOV access interchange)
 - Enhancing efficiency through strategies such as managed motorways, system-to-system ramp metering, or smart communications between modes (freeway/roadway/transit)
 - Better access across I-15 via more overpasses



- Transit was very popular among meeting participants, receiving the highest number of mentions among the comments. Trends included:
 - Improvements to FrontRunner such as doubletracking, electrification, improved amenities such as reliable high-speed internet, increased speed, and increased frequency
 - Better integration and connection of modes to TRAX and FrontRunner, including first/last mile strategies, freeway access to stations, and more parking at stations
- Pro/con comments about particular transportation projects were evenly balanced. For every comment opposing West Davis Corridor, I-15 Elevated, or the Utah Lake bridge project, another comment voiced support. There were low numbers of these kinds of comments, however, and they did not dominate the conversation.
- Active transportation – and particularly bicycling – received considerable support from participants (roughly on the same level as freeway projects) even though no cycling-specific advocates were able to attend the meeting. Worth noting is that all comments specified either bicycling or active transportation; pedestrians were not specifically cited in any comments. This represents a blind spot in our perception of need, and reduces our ability to plan for populations with impaired mobility who behave more like pedestrians than cyclists.
- Multiple comments mentioned a need for a multi-modal transportation system, balancing access across all modes of transportation.
- While air quality is a frequent hot-button topic (particularly during the winter inversion and the legislative session), it was scarcely mentioned in the comments: only 4 of the 88 comments made direct or indirect mention of air quality issues.



Applying the Feedback Received

This information will be applied at two different stages in the planning process. First, during summer 2015 the project team will be developing the problem statement, the goals and objectives, plus the performance measurements for the Wasatch Front Central Corridor, which will later be applied to long-term investment packages. The map comments will be integrated into value statements as well as goals and objectives from the following sources.

- Adopted agency policies and plans.
- Utah Values survey conducted prior to the Your Utah Your Future effort by Envision Utah.
- Key Person Interviews conducted by the WFCCS communications team.

Second, information from the map comments and the debate groups will also be used to inform the development of long-term investment packages, beginning later in 2015. Specific transportation concepts listed by TrendLab+ meeting participants (for instance, a regional bikeshare program, east/west I-15 overpasses, managed motorways, and other options) will be considered when developing the initial investment packages. These will be combined with a wide range of other brainstormed strategies and screened for further refinement. Feedback received may also help define the general types of strategies included in each package; for instance, based on the comments received at this meeting, packages may include a more robust bicycle network but less focus on additional pricing strategies. Comments received at TrendLab+ meeting may also influence how effectiveness of each investment package is communicated: given the acknowledgement of uncertainties across several issues, the project team may describe effectiveness of packages in ranges to demonstrate some of the uncertainties inherent in forecasting results to 2050.

Meeting Documentation

Panel Presentations

A pdf of the PowerPoint presentations is attached to this memorandum.

Debate Groups

This document summarizes the Wasatch Front Central Corridor breakout group session from the TrendLab Workshop on Wednesday, May 20th. Attendees were divided into six different breakout groups: Show Me the Money, Idle Engines, Idle Hands, There's an App for That, My Other Car is a..., Look, Ma! No Hands! and Engines of Growth. Breakout group leaders are highlighted in bold.

SHOW ME THE MONEY!

Participants

- **Ron Milam (Fehr & Peers)**
- John Thomas (UDOT Asset Management)
- GJ LaBonty (UTA Long Range Planning)
- Dave Smith (Penna Powers)
- Wayne Bennion (WFRC)
- Danny Page (UDOT Traffic and Safety)

Labor Force Participation

- Outlook for Utah is **stable/positive**. Current labor force participation **could increase** given state's desirable quality of life.

Fuel Cost per Mile

- Likely trend is for fuel costs on a per mile basis **to decline**.
 - Fuel efficiency standards will be a contributing factor

GDP and Real Income Growth

- **Optimistic about the future** for growth opportunities in the State/region. Plenty of evidence that Utah is different than the rest of the nation.
 - Diversity of employment compared to 80s and 90s
 - Outdoor recreation/visitors
 - High birth rate

- Desirable quality of life that could lead to greater migration from other states
- Political recognition that a high quality of life is connected to a high quality transportation network
 - Willingness to invest even during economic slowdowns (I-15 Core and Frontrunner being built during recession)
- Diversity of physical geography and urban design allows for multiple lifestyle opportunities (i.e., City Creek and downtown living to rural/agricultural areas)

Other Discussion Topics

- Air quality is a consistently identified problem for the region, but **little ‘prescriptive or mandatory’ action (i.e., change fuel mix, higher fuel efficiency standards, etc.) has been taken by the State** even when poor air quality was evidence of turning away some businesses.
 - Business community is finally getting engaged and acknowledging that the problem is severe enough for action.
 - Preferred action is more incentive based despite evidence from California that prescriptive action is effective.
 - **Core beliefs about independence and freedom to choose** are motivating factors influencing this response.
- The same factors listed above likely suggest there will be little or no support for WFCC solutions involving pricing. **Solutions need to focus on improving travel reliability and choices.**

Current **roadway network experiences poor utilization** (whether measured on a vehicle or person throughput basis) which is becoming better understood. Could increase interest in managed motorways and other solutions that **can demonstrate efficiency improvements** without creating disincentives to travel

IDLE ENGINES, IDLE HANDS

Participants

- **Don Samdahl (F&P)**
- Roger Borgenicht (ASSIST)
- Eric Rasband (UDOT TOC)
- Shawn Seager (MAG Dep. Director)
- Richard Brockmyer (UTA Long Range Planning)
- Angelo Papastamos (UDOT Planning)
- Kordel Braley (RSG)
- Patrick Cowley (UDOT R2)

Value of Time:

- Not changing much
- Transit users value time differently
- Desire for single family homes
- Need to split modes more during peak periods
- Transit should be free during peaks (from an MPO representative)
- Transit is already at or near crush load during peaks (from a UTA representative)
- Can we increase transit capacity during peaks with more money?
- Some group members feel that young people still want cars just as much as previous generations
- Discussed convenience of transit (time, transfers, etc.)
- Recreation very important to Utah, and cars are needed for this
- Everyone is going to have a car no matter what
- Frequency of service and connectivity most important for transit
- Discussed automated vs autonomous
- If there is technology such as wifi in autonomous, then that would be very attractive

Vehicle Fleet (relating to autonomous vehicles):

- Some think what was shown on slides is realistic
- Some are skeptical and think autonomous will never happen, especially in cities, etc.
- Some think this will increase traffic
- Will cause more land use to need to be parking, but on the fringes, not downtown
- Conversion of some lanes to autonomous first, such as HOV -> HOT -> Autonomous Only
- Cost of infrastructure very high, for users and system. How would we ever pay for that when we can't even pay for existing infrastructure?
- But, we've paid for other infrastructure such as cell towers, and data networks.
- Exciting that this could be a huge safety benefit
- One group member: "I'll believe autonomous vehicles can be safe when my printer stops breaking."

Congested Pricing:

- Are autonomous vehicles and congestion pricing mutually exclusive?
- Too much extra capacity right now
- Congestion isn't bad enough yet for CP or transit/TOD to thrive
- Land is still too cheap
- What if freeway was 100% managed?
- Demand would be much more spread out.
- Large employers such as research park aren't budging on work schedules

Additional Discussion on Autonomous Vehicles and Other Concepts:

- Group hopes we get there soon for safety
- 50% there by 2050 seems realistic
- Diminishing returns of adding freeway lanes, so this is not the answer
- Research shows adding a HOT lane decreases capacity in GP lanes by 6%
- Ramp metering is key
- Millennials earn less than previous generations
- How we grow up determines how we want to get around when we're older
- Still many rural areas on Wasatch front, but those will likely develop. But how? Dense or more sprawl?

- Problem is getting to/from the main corridor from the outer areas.
- Much of WF is very suburban in nature
- Need better bicycle system
- Funding/design
- Could drought affect future land use?
- Discussed discretionary trips during peaks. One large problem is youth sports (all practices/games need to occur after school, but before its dark = during PM peak).

THERE'S AN APP FOR THAT

Participants

- **Charlie Alexander (F&P)**
- Cory Pope (UDOT Program Development)
- Rachel Otto (Breathe Utah, Exec. Director)
- Ted Knowlton (WFRC Dep. Director)
- Jason Davis (UDOT)
- Andrea Moser (Bio-West)
- Justin Smart (Penna Powers)

Delivery of Goods:

- Majority of long haul and even neighborhood deliver done by trucks currently
- New models (one-hour delivery, same-day, etc.) may require more personal delivery mechanisms (drone, bike, private car, etc.)
- Online/cyber shopping could eliminate some discretionary trips, which may provide a form of TDM as the delivery companies find off-peak times to ship goods between locations and deliver during out of peak times of day
- Eliminating/decreasing the number of trips has an air quality benefit due to reduction of cold starts
- Trajectory of online shopping is exponentially up due to convenience, Millennial generation familiarity, etc.
- How can orgs plan better for changes in commerce
- Need to ID location of distribution centers and ensure good mobility for multiple modes in and out

Social Media Impact on Social Interaction/Need for Travel

- There is a trend toward using technology for interaction (Facebook, FaceTime/Google Chat, etc.) but the group didn't feel this would be a major disruptor
- People still have the need to get together to interact face to face/share their space
- Next generation will likely want transport options that allow them to continue to use technology while they travel
- Increased demand for transit, autonomous, etc.?

How are Apps and Technology Affecting Driving, Transit Use, Car Sharing, Bike Sharing, etc.

- Apps used most by this group
 - UDOT Traffic
 - SLC Riders (bike mapping)
 - Google
 - Route Tracker (third-party transit app specific to UTA system)
- Brief discussion about when UDOT might get out of the app business
 - Can the private sector take our data and use it better, more efficiently, more features, etc.
- Technology is making choices more viable (i.e., because I have technology solutions that make it easier to bike, take transit, etc., I am more likely to engage those modes)
 - As awareness of technology solutions increases, attitudes toward these alternatives may become more positive
 - Confidence in modes is critical

What is the Trip You Make That Would be Hardest to Replace with Another Mode?

- Overwhelmingly, home to work was the hardest to replace with a non-SOV option for this group
- This suggests the need to better align land use planning, operations planning, project delivery with origin/destination information and studies

Other Topics

- Drones would be a good solution for commerce
 - Technology is there
 - Regulatory issues will be the big stumbling block
- 3-D printing has the potential to disrupt many industries, transportation included
- What tech haven't we seen yet that could be a disrupter?
 - Holograms (could make remote meetings/telecommuting much more palatable)
 - Toll/Transit interactivity (i.e., congestion price the freeway higher while offering a credit for taking the train on a given day; currently being done in other countries)

MY OTHER CAR IS.....

Participants

- **Nate Conable (F&P)**
- Lisa Zundel (UDOT Project PM)
- Brian Phillips (UDOT R3 PM)
- Grey Turner (UTA Capital Development)
- Jon Larsen (WFRC Lead Modeler)
- Greg Scott (WFRC Planning)
- Jen Elsken (UDOT Environmental)
- John Bennett (Governor's Office of Management and Budget)
- Kris Peterson (UDOT R1 Director)
- Julie Bjornstad (F&P)

Urban Compact Areas

- The region is starting to see urban, compact growth, mostly concentrated in Downtown and Sandy. However, the fastest growing areas are greenfield areas, not redevelopment.
- Overall, average lots sizes are decreasing.
- The Governor's Office estimates that internal population growth is responsible for 2/3rds to 3/4ths of the overall future population growth.
- Noted areas of growth are:
- The Orem Mall is being redeveloped into a mixed use center.

- A trend is beginning for micro apartments along the TRAX/FrontRunner corridor to house visitors from out of town who are visiting the Silicon Slopes.
- Compact development in the Wasatch Front is an estimated 50-60 units per acre in downtown Salt Lake City and 30-40 units per acre near 4500 South in Salt Lake County.
- Parking rates are lower in downtown Salt Lake City than in suburban areas because TRAX has a more significant presence in downtown.
- Density is quickly lost – it was estimated that density declines significantly within one to two blocks, or a quarter of a mile, from a TRAX station.
- Cities within the study corridor are the most eager to see densification.

Silicon Slopes

- Salt Lake County is becoming a commute corridor between the airport and North Utah County.
- The price per square foot in Silicon Slopes is higher than downtown Salt Lake City. The main drivers of this are the technology hub and the accessible higher education.
- The Silicon Slopes area is designed to be auto-centric and this comes at the expense of a walkable and bikeable community.

Drive to Qualify

- There are distinct demographic groups within the region. The region still has people who prioritize square footage and are willing to locate away from the urban center. Forty to sixty minutes was determined to be the drive-to-qualify times.
- Reliability of the transportation system is an important element when determining commute times.
- Daybreak is attractive because it is very walkable.
- The job-housing balance is important, especially in diversification. For instance, Lehi is an employment and population center, but there is no diversification of jobs.

Active Transportation

- Active transportation is a growing mode share in the region, although it was unclear where this was purely recreationally or also for commuters.
- Biking conditions around the region were generally determined to be inadequate and this is a factor in more people not riding, specifically in this corridor.

Summary

- There are two worlds – the corridor vs. the region. While the region may be growing less compactly, the corridor wants to be denser and more active transportation focused.
- The region has gone through an expansion phase and now development should be focused on infill.
- There are opportunities to increase active transportation and transit-oriented lifestyles through better connectivity and more reliable service.

LOOK, MA! NO HANDS!

Participants

- **Stephen Lawe (RSG)**
- Blaine Leonard (UDOT ITS)
- Matt Sibul (UTA Planning Director)
- Robert Miles (UDOT Traffic and Safety)
- Chad Saley (UTA Communications)
- Nathan Lee (UDOT R2 Director)
- Steve Call (FHWA)
- Jeff Simmons (HDR)

What do Agencies do with respect to uncertainty?

- UDOT discussed uncertainty with travel demand. They default to WFRC numbers, but feel there is still a lot of uncertainty in the numbers.
- It was also discussed that UDOT's take on uncertainty is "Let's try it attitude". Basically coming from all the new interchange and intersection types UDOT has adopted (many times one of the first in the country to take a chance and try them out).

- Express lanes were discussed and the different possibilities of tolling. If tolling increases on the highway, UTA ridership will likely increase and eventually it could turn into a battle between toll pricing vs UTA fares.
- UTA uncertainty mainly stems from the question: How many people will ride UTA versus drive cars.
- It was discussed that it would be great if it got to a point where a failure on one side (UTA vs UDOT) was not needed to garner success from the other. i.e. major construction on I-15 may drive more folks to ride UTA. Conversely, If UTA cannot keep schedule on buses, light rail, etc. commuters are more likely to drive/carpool than ride UTA.
- Another uncertainty discussed was remote working. Maybe not so much in the next 10 years, but many businesses (including FHWA) are allowing employees to work remotely at least a couple days a week currently. This could ultimately affect UTA ridership and demand on UDOT roads.
- UTA uncertainty: Gas prices affect UTA, especially with respect to buses as operating costs increase. Conversely, ridership goes up when gas prices are up.
- UTA will be lowering bus prices in July by 40%....kind of a test to see if it stimulates ridership.
- The group has a detailed discussion regarding the pros and cons of remote working. The uncertainty of the number of remote workforce going forward is a major factor for all of the partner agencies.

ENGINES OF GROWTH

Participants

- **Chris Williges (HDR)**
- Ned Hacker (WFRC Long Range Planning)
- Grant Farnsworth (UDOT TOC)
- Jeff Harris (UDOT Planning)
- Dan Adams (Langdon Group)
- Tracy Conti (Horrocks)
- Kyle Cook (F&P)

Outlook for Funding

- Outlook for UDOT **roadway funding** is optimistic for both capital construction and maintenance. Transportation currently receives a generous portion of sales tax (17%), and recently received an additional excise tax increase on fuel sales. It was noted that the legislature has previously considered directing some transportation funds towards education, so some uncertainty in that regard.
- High value on transportation investment, as noted in recent sales tax and gas tax increases that will direct funds towards transportation (including transit and active transportation).
- **Active transportation** funding is relatively insignificant, but getting better.
- **Transit** funding is scarce and there is concern about covering basic maintenance obligations.

Cultural and Political Paradigm

- Like it or not, in the current cultural and political reality, there is a strong appetite to build roadway capacity.
- To realize higher levels of investment in transit and active transportation, there needs to be a paradigm shift.
- Education is important. Explaining the value of investing in non-auto modes in relatable terms is crucial (e.g. economic argument, public health, air quality).
- Programs like “Wasatch Choice 2040” and “Your Utah Your Future” are great examples of the public outreach that has occurred, though there is a feeling that these resonated with policy decision makers but not the general public.
- Regional Transportation Plan is primarily focused on roadway issues. Transit investment is less aggressive than in years past, due in part to the expected funding constraints. Active transportation elements are included however, which signals an increasing value in non-auto modes.
- There is limited tolerance for congestion. A policy that allows congestion to build will likely be challenged.

Land Use

- Wasatch Choice 2040 envisioned regional and sub-regional centers with concentrated land use density and mix. Some question if these places will be fully realized lacking any mechanism to influence how land use is developed.

- Candidate locations for growth: State Prison, University, Airport, and Salt Lake Central Business District
- Densification within the I-15 corridor is a paradox – one might create walkable transit oriented communities while also increasing the overall activity and thus vehicle trips.
- Expect incremental change until there is some significant change, such as: build out constrained by geography, scarcity of water, intolerable air quality.
- Utah County growth pattern is very much oriented towards single family lots. This is an example of how one region may continue to grow in an auto-oriented manner, while an adjacent region tries to go another direction. Ultimately, the choices of these adjacent regions will influence one another and potentially swamp gains made toward vehicle trip reduction.

Price Incentives

- Transit is not cost competitive with auto travel. If someone already owns a vehicle, the marginal cost to make trips is perceived to be less than transit fare.
- Need to charge the true price of the service, particularly with respect to vehicles travel and infrastructure.

Travel Demand Management

- Congestion here really is not that bad, relatively speaking. Manage demand by spreading out the peak period travel. This worked well during the 2002 Winter Olympics, when employers were encouraged to implement Travel Demand Management strategies.
- Connectivity and ability to work anywhere promotes the ability to trip chain and telecommute effectively.

Freight & Commerce

- National commodity flows have a value that extends beyond local values. Interstate 80 and I-15 are critical parts of system.
- Expect substantial increase in truck freight activity in the future.



Map Comments

A spreadsheet of comments received on the maps is attached to this memorandum.

Map comments can be viewed online via this webmap link:

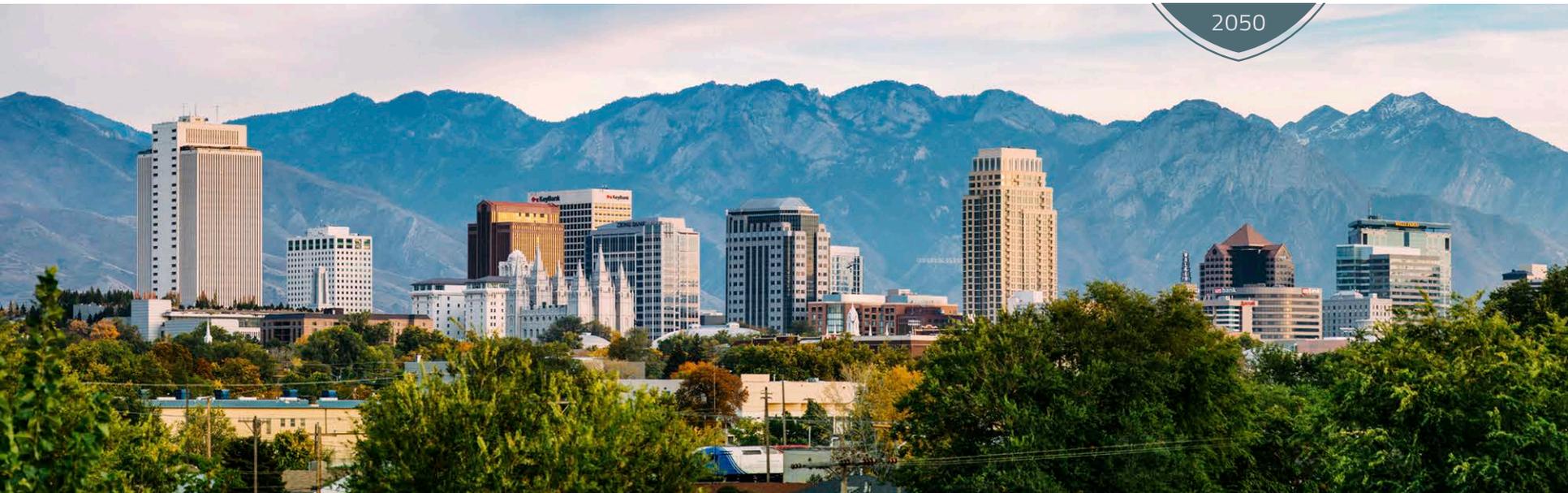
<http://gis.fehrandpeers.com/I15FrontRunner/>

<u>County</u>	<u>Type</u>	<u>Comment</u>	<u>Mobility</u>	<u>Environment</u>	<u>Economics</u>	<u>Safety</u>	<u>Accessibility</u>	<u>State of Good Repair</u>
Weber	Avoid	Encouraging cold starts in Weber County by building p&r lots etc.		1				
Weber	Create	Upgrade 5600 S interchange incl. access to Hill Field					1	
Weber	Create	Improve link to Wasatch Front transit for counties outside the study area					1	
Weber County Summary			0	1	0	0	2	
Davis	Avoid	Unrealistic solutions						
Davis	Avoid	Avoid objectives of just maximizing auto thru-put						
Davis	Create	Improve I-215/I-15 interchange to allow all movements improve ability to divert to/from legacy	1				1	
Davis	Create	Double track FrontRunner, so not stopping	1					
Davis	Create	Increase FrontRunner frequency	1					
Davis	Create	Address first/last mile transit connections					1	
Davis	Create	New I-15/89 legacy interchange - multi modal friendly					1	
Davis	Create	Interchange between US-89/I-15 split and 200 N in Kaysville	1				1	
Davis	Create	Improve FrontRunner speed&connections. double track, electrify, TOD @ stations	1					
Davis	Create	Faster more reliable internet (on FrontRunner)						
Davis	Create	West Davis Corridor	1					
Davis	Create	Public consensus about need for behavior change						
Davis	Protect	Protect Legacy Parkway Preserve		1				
Davis	Protect	Mobility for all modes	1					
Davis	Protect	Sensitive wetland areas around GSL		1				
Davis	Protect	Protect communities and farmland with improved arterial grid and no new freeways		1			1	
Davis County Summary			7	3	0	0	5	
Salt Lake	Avoid	Free parking						
Salt Lake	Avoid	ROW expansion along I-15						
Salt Lake	Avoid	Loss of new employers moving to Utah due to a reputation of poor air quality (actual and perceived)		1	1			
Salt Lake	Avoid	Avoid negative impacts to air quality		1				
Salt Lake	Avoid	Solutions that punish. look to incentivize to change behaviors						
Salt Lake	Avoid	Uncrossable roads					1	
Salt Lake	Avoid	Elevated freeway, traffic impacts to surrounding networks, visual impacts, initial and ongoing costs		1				
Salt Lake	Avoid	Encouraging more SOV in canyons		1				
Salt Lake	Avoid	Nbhd. impacts		1				
Salt Lake	Create	Walkable urban design in silicon slopes area. street connectivity. mixed use. building layout					1	
Salt Lake	Create	Light rail to Lehi	1					
Salt Lake	Create	Grade separated rail. TRAX and FrontRunner	1					
Salt Lake	Create	E/W connections through I-15 to improve use of surface streets	1				1	
Salt Lake	Create	Improved FrontRunner traveltime. double track. electrify	1					
Salt Lake	Create	Transit centers and separate bike corridors on I-15 corridor	1				1	

Salt Lake	Create	Better collection/distribution for transit						1	
Salt Lake	Create	Connectivity to transit						1	
Salt Lake	Create	Manage motorways	1						
Salt Lake	Create	HOV access interchange	1						
Salt Lake	Create	Easier access from I-15 to train stations (quicker on/off)						1	
Salt Lake	Create	E-W capacity inc. w overpass only (more) over I-15						1	
Salt Lake	Create	Implement "Life on State". a series of destinations that are walkable and attractive for development				1			1
Salt Lake	Protect	Urban livability (what will attract, what could repel)				1			1
Salt Lake	Create	Better access to downtown from the north. Multi Modal. Cars, bikes, etc.							1
Salt Lake	Create	NW Quadrant connectivity freight/transit				1			1
Salt Lake	Create	Regional bike system	1						
Salt Lake	Create	Bike trails everywhere	1						
Salt Lake	Create	Improved communication between systems signal-transit transit-user highway-user	1						
Salt Lake	Create	Create opportunities for low-income population on the west to access transit/transportation				1			1
Salt Lake	Create	Create more parking at transit stations (whole corridor)							1
Salt Lake	Create	FrontRunner double track/ electrified	1						
Salt Lake	Create	FrontRunner double track/ electrified	1						
Salt Lake	Create	Smart cities, smart parking, connected transportation							
Salt Lake	Create	Increase transit, frequency/coverage, reduce transfers	1						
Salt Lake	Create	FrontRunner double track	1						
Salt Lake	Create	System ramp meters I-80 E, I-80 W, SR-210, collectors	1						
Salt Lake	Create	Elevated freeway lanes \$2 Billion	1						
Salt Lake	Create	Expanded transit hours of service (usable for those transit dependant by choice or circumstance)							1
Salt Lake	Create	Transit frequency increase (commuter rail)	1						
Salt Lake	Create	Multi-modal connectivity	1						1
Salt Lake	Create	Develop a selected network of separate bike real estate	1						1
Salt Lake	Create	Increased transit frequency	1						
Salt Lake	Protect	Protect improve function of interchanges	1						
Salt Lake	Protect	Protect open space/green space			1				
Salt Lake	Protect	Travel time across modes	1						
Salt Lake	Protect	Current and future transit corridors rail and bus	1						1
Salt Lake	Protect	Mountains trails other recreation accesibility			1				
Salt Lake	Protect	Protect mtn viewshed from valley/central corridor			1				
Salt Lake	Protect	Protect air quality			1				
Salt Lake	Protect	Access to recreation			1				
Salt Lake	Protect	Mountain,water, recreation, visual			1				
Salt Lake	Protect	Jordan River Parkway			1				
Salt Lake County Summary			23	12	5	0	18	0	
Utah	Avoid	Bridge (avoid)							
Utah	Avoid	High Family transportation costs				1			1
Utah	Avoid	State control of federal lands							

Utah	Avoid	Avoid development foreclosing trans options through proactive long-term planning corridor pres.						1	
Utah	Create	Planned future growth between cities							
Utah	Create	Improved transit south of Provo and between AF and Provo	1					1	
Utah	Create	Regionalize Provo and Ogden bike sharing (GreenBike) integrate with transit stations						1	
Utah	Create	Bridge (create)	1						
Utah	Create	Connected streets	1					1	
Utah	Create	Extend TRAX from Salt Lake County to Utah County	1					1	
Utah	Create	Light Rail to Utah County	1					1	
Utah	Create	Create first/last mile connections to make transit more attractive and time-efficient						1	
Utah	Create	Seamless connections to FrontRunner						1	
Utah	Create	Create bicycle network through cities/region to support safer bicycle travel everywhere						1	
Utah	Protect	Maintain great economy and high quality of life		1	1				
Utah	Protect	ATV Trails							
Utah	Protect	The lake and June sucker		1					
Utah County Summary			5	2	2	0	10	0	
All Comments			35	18	7	0	35	0	

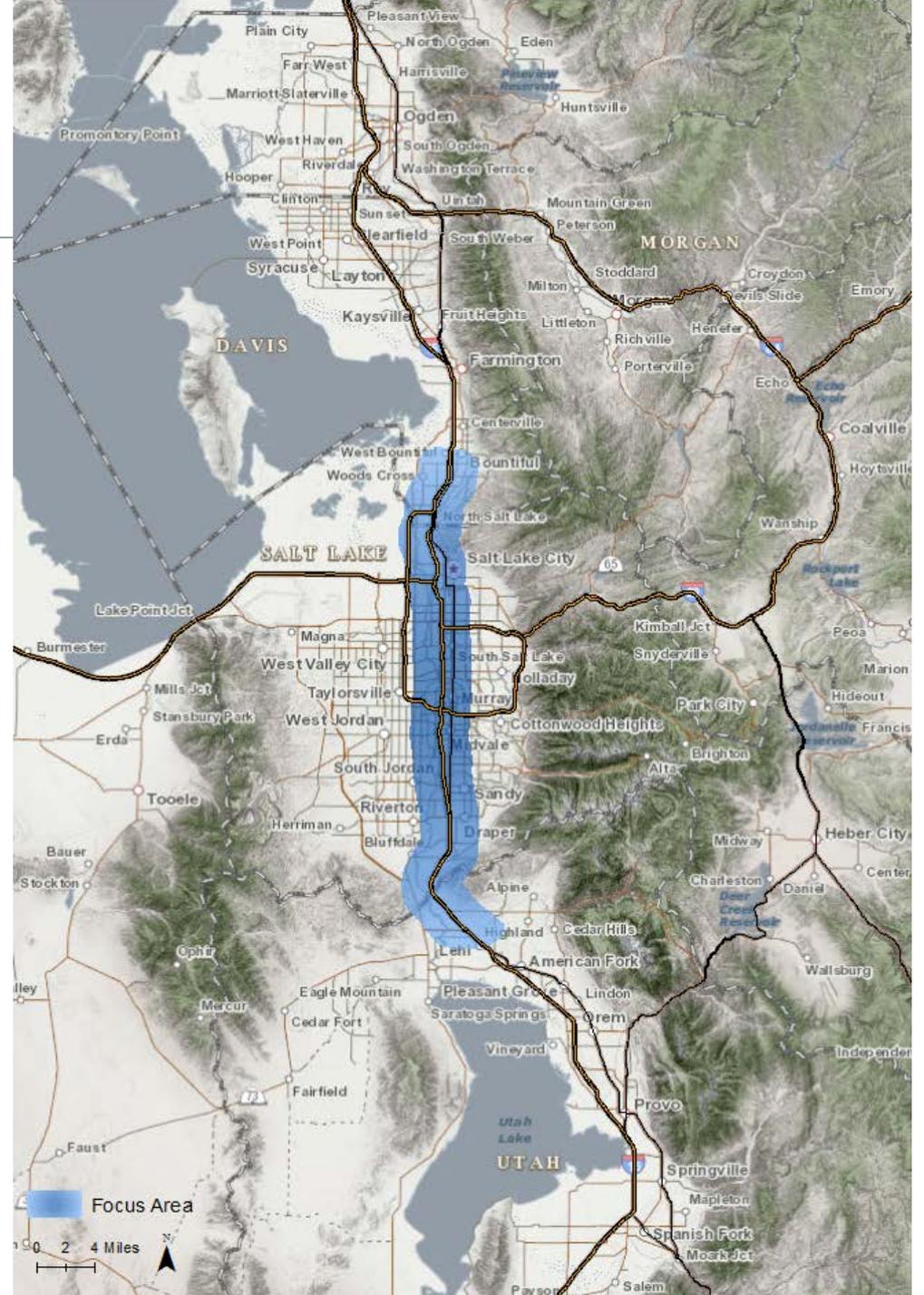
TrendLab Workshop



Exploring Future Trends | May 20, 2015



Focus Area



Background

- Projected Wasatch Front population by 2040: 3.5 million (65% increase)
- I-15: 230,000 vehicles per day;
- TRAX/FrontRunner: 80,000 riders per day



Key Issues:

- Maximizing efficiency of the system we've built
- Maintaining mobility
- Preserving economic competitiveness
- Sustaining our quality of life

Workshop Purpose

Why are we here today?





There are known
knowns. These
are things we
know that we
know.



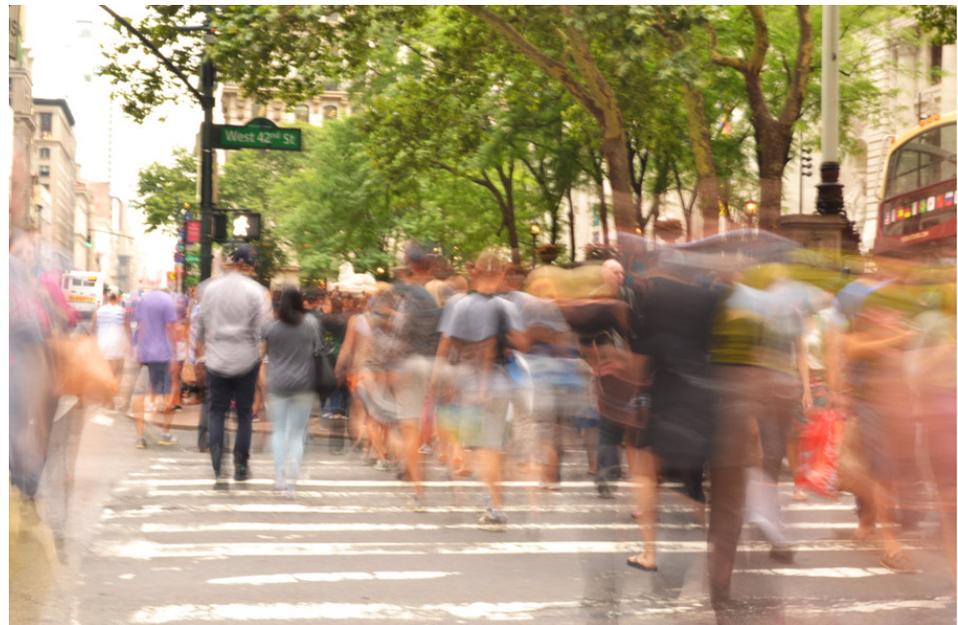
There are known unknowns...these are things that we know we don't know.



But there are also unknown unknowns. These are the things we don't know we don't know.

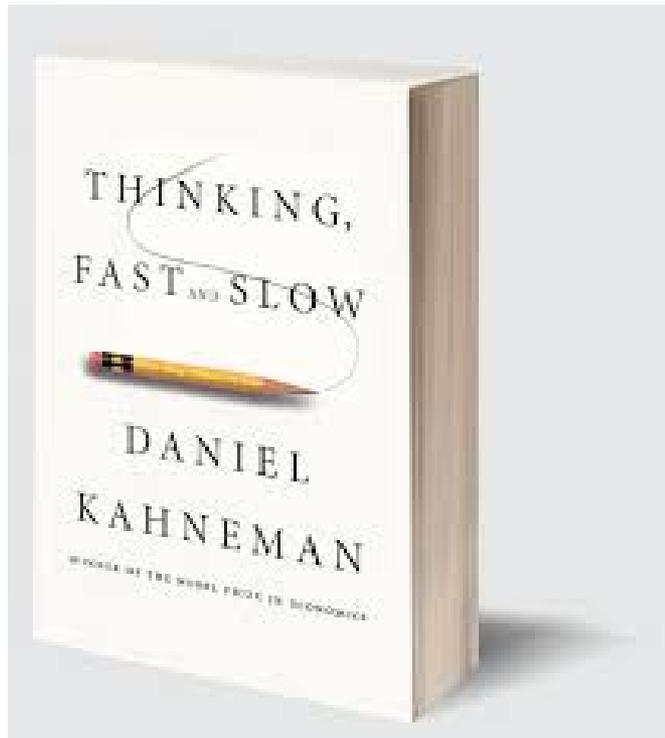


Today: How will
changing trends affect
our transportation
systems?



Why is it important to consider the unknowns?

WYSIATI



What You See Is All
There Is

Today's Activities

Agenda

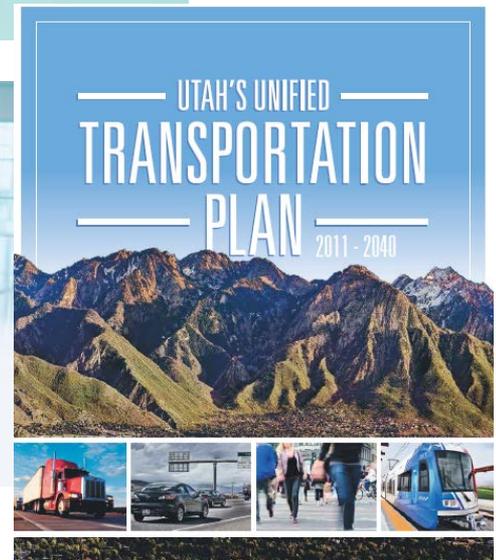
- TrendLab: What do you believe? What do industry experts see?
- Debate the Trends
- Community Values

Applying Your Feedback

Where does it go?



What else goes in?



TrendLab

How do you envision the future?





THINKING LIKE A FUTURIST

The impacts of future changes in traveler behavior and travel mode on the transportation system.

part 1 HISTORICAL PLANNING CONTEXT

part 1

HISTORICAL PLANNING CONTEXT

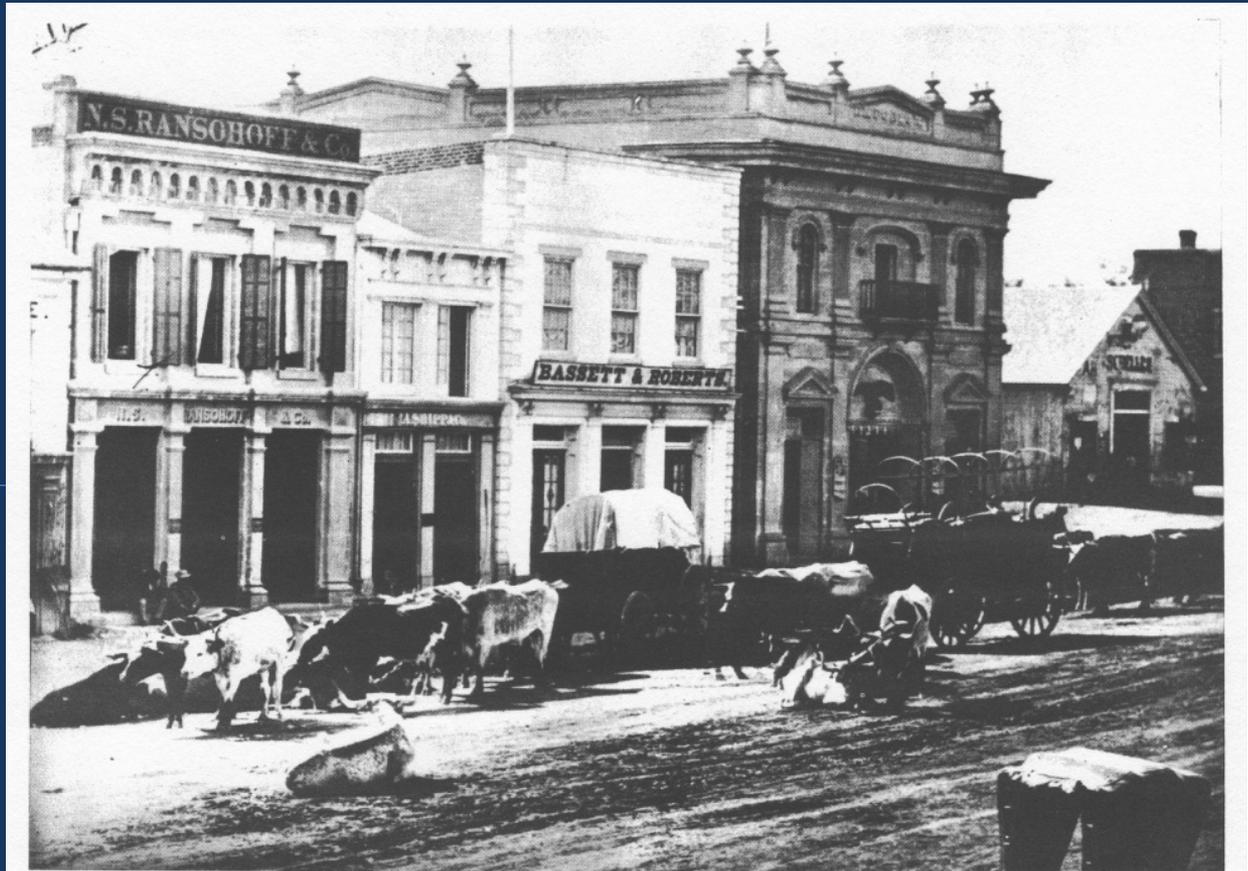


Figure 6. Main Street of Salt Lake City, Utah, 1869, with the shop of Nicholas Siegfried Ransohoff, one of the early German-Jewish merchants in the West. Courtesy Utah State Historical Society, Salt Lake City.

Source: http://www.hist-chron.com/USA/EncJud_juden-in-USA-d/EncJud_USA-band15-kolonne1597-1598-Salt-Lake-City1869.jpg

part 1. HISTORICAL PLANNING CONTEXT



Source: Strategic Economics, Berkeley, CA

part 1. HISTORICAL PLANNING CONTEXT



© 2010 Ann Torrence
www.anntorrence.com

Source: <http://www.anntorrence.com/blog/2010/01/ten-more-from-2009.html>

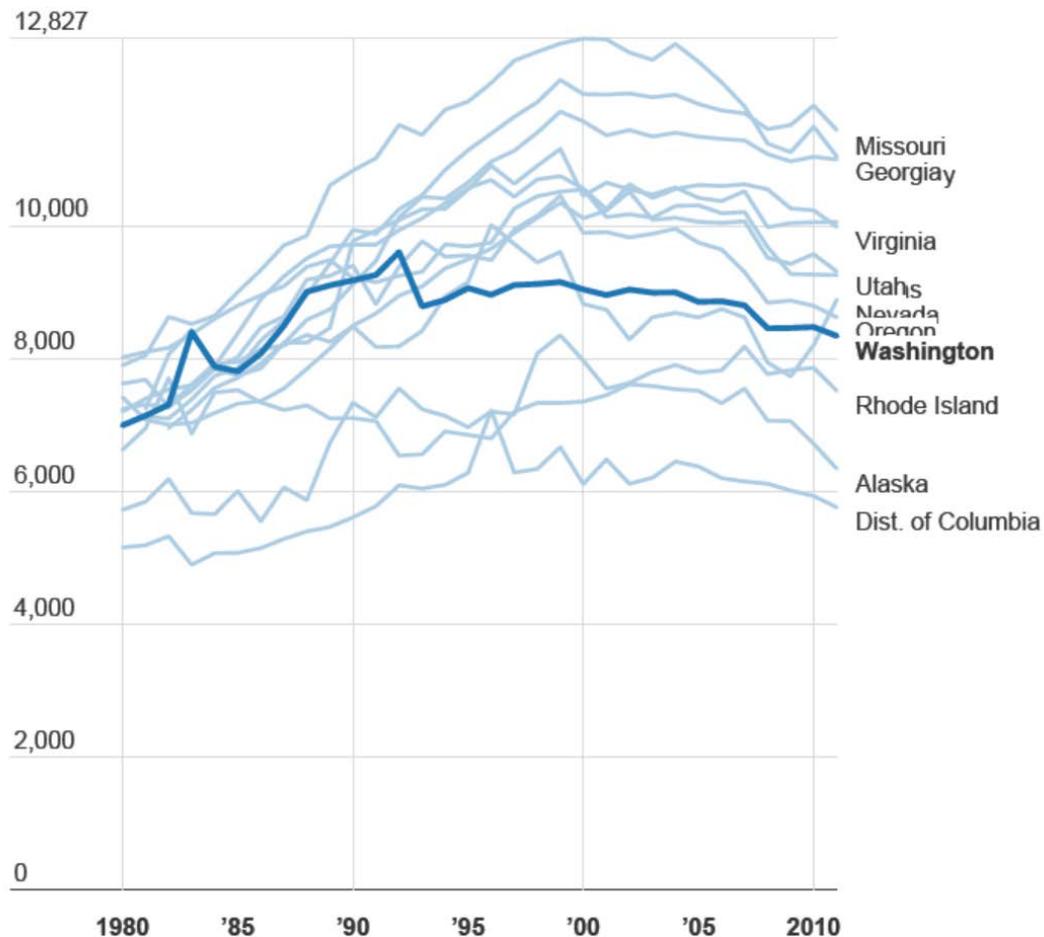
part 1 VMT TRENDS

trends

VMT TRENDS

Peak Car, 2002 or earlier

Annual vehicle miles traveled per capita



Source: Timothy J. Garceau, Carol Atkinson-Palombo, Norman Garrick, University of Connecticut

trends

FACTORS IMPACTING VMT

Labor Force Participation

Driving Age Population

Vehicle Ownership

Licensing Regulations

Gasoline Prices

Congestion & Time Use

Non-Auto Mode Options

GDP, Real Income Growth

Suburban Migration

Household Formation

Goods & Services Delivery

Tele-Commuting

Social Networking

Internet Shopping

Autonomous Cars

Driverless Vehicles

trends

FACTORS IMPACTING VMT

1970-2003
increase

2004-2013

2013-2035



trends

1970 TO 2004; INCREASE



trends

FACTORS IMPACTING VMT

1970-2003

2004-2013

2013-2035

decrease



trends

■ 2004 TO 2013; DECREASE



trends

FACTORS IMPACTING VMT

1970-2003

2004-2013

2013-2035

mixed



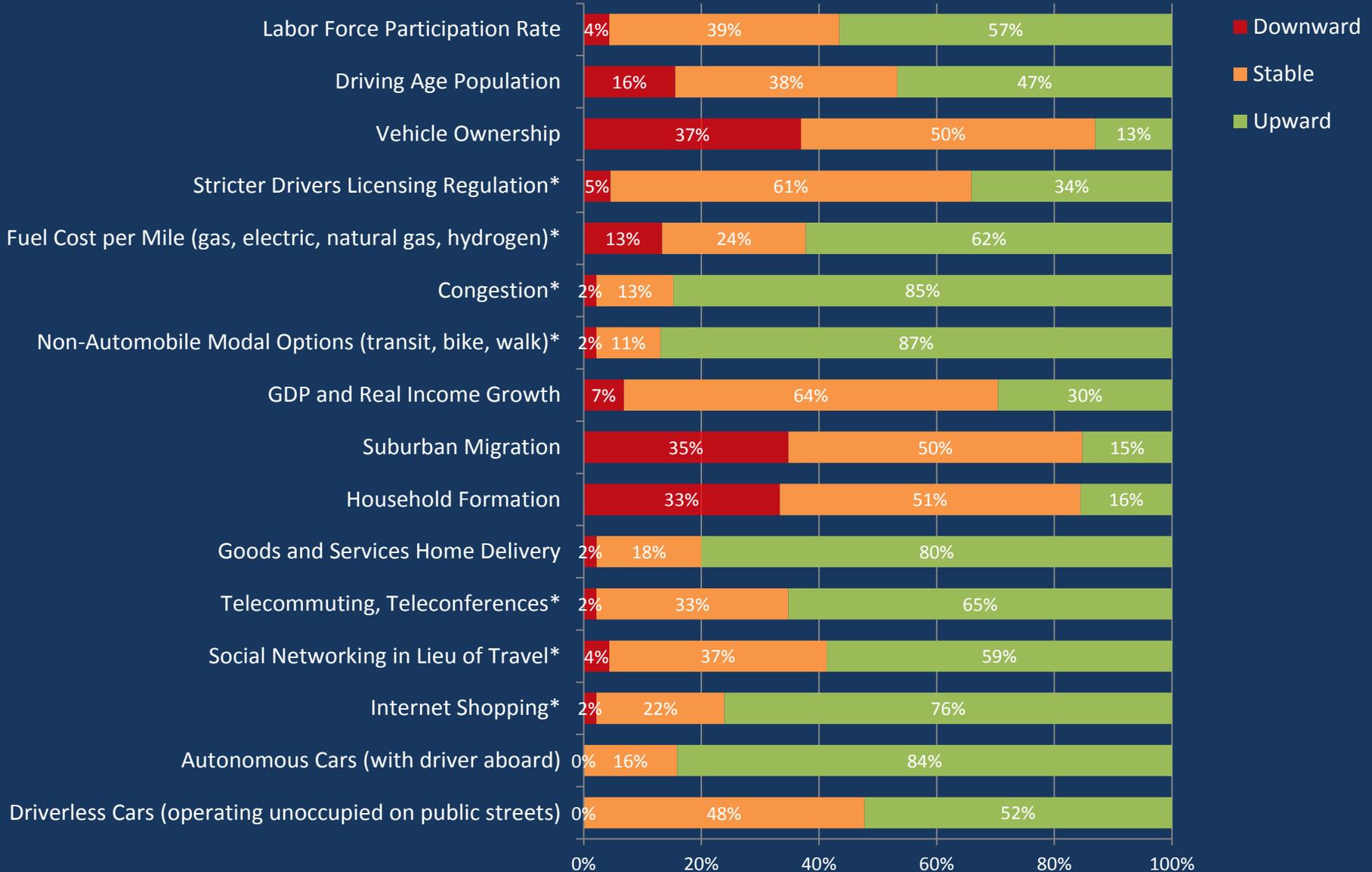
trends

2013 TO 2035; MIXED



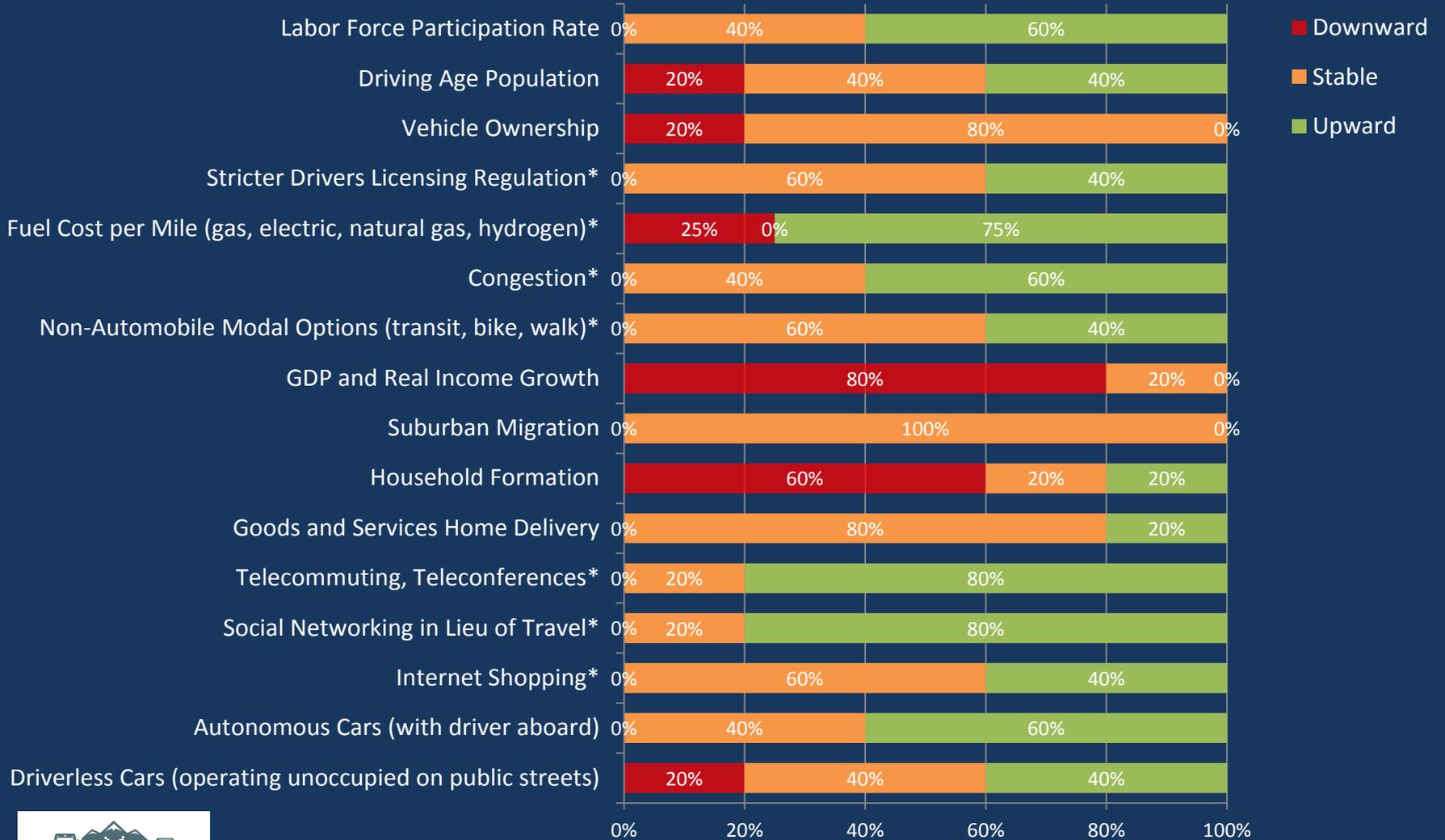
trends

WFCC PARTICIPANT RESPONSES



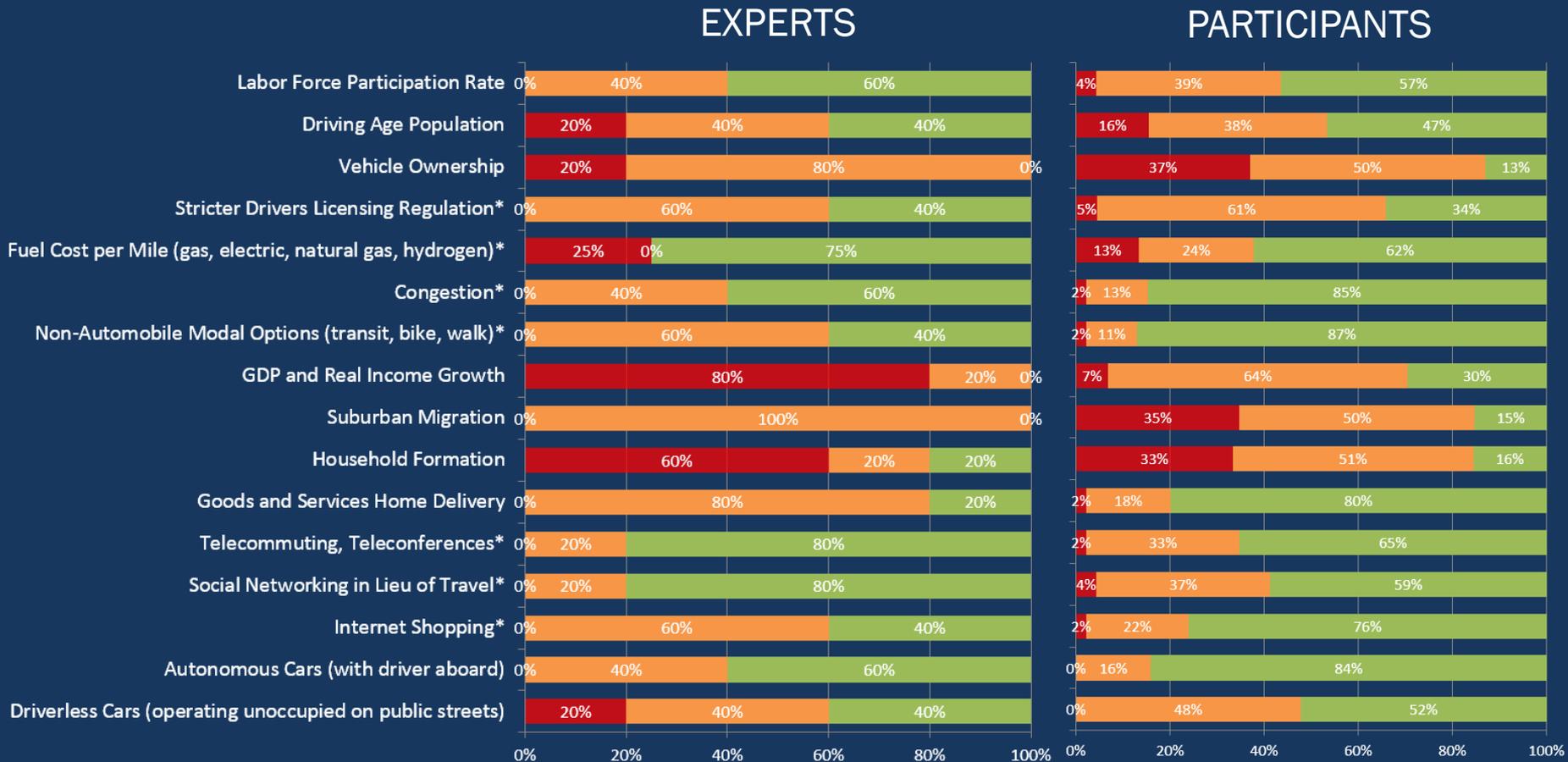
trends

WFCC EXPERT RESPONSES



trends

WFCC RESPONSE COMPARISON



trends

WFCC PARTICIPANT RESULTS



trends

WFCC EXPERT RESULTS



trends ■ INITIAL IMPLICATIONS

- Forecast ranges, general direction and magnitude
- VMT will not keep growing as it has
- **Raises question of transportation investment priority**
 - **Expand the network or better manage the network?**

Industry Expert Responses

Individual Perspectives on Future Trends



Charlie Alexander Fehr & Peers

Active Transportation

Is This the Future of Active Transportation?



Scene from *WALL-E*, Pixar Animation Studios

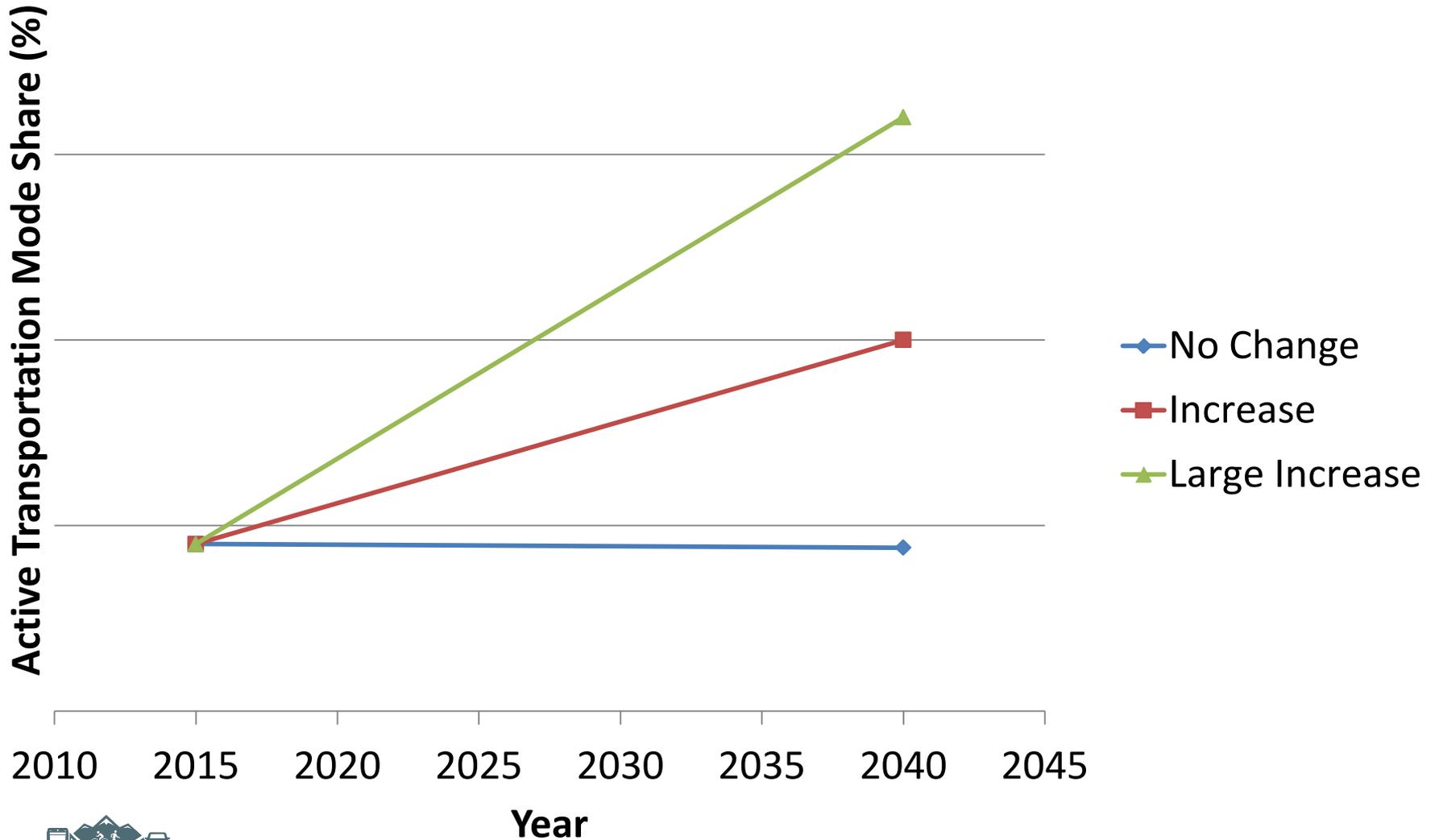
Past Trends May Be an Indication



Is This a Disruption?



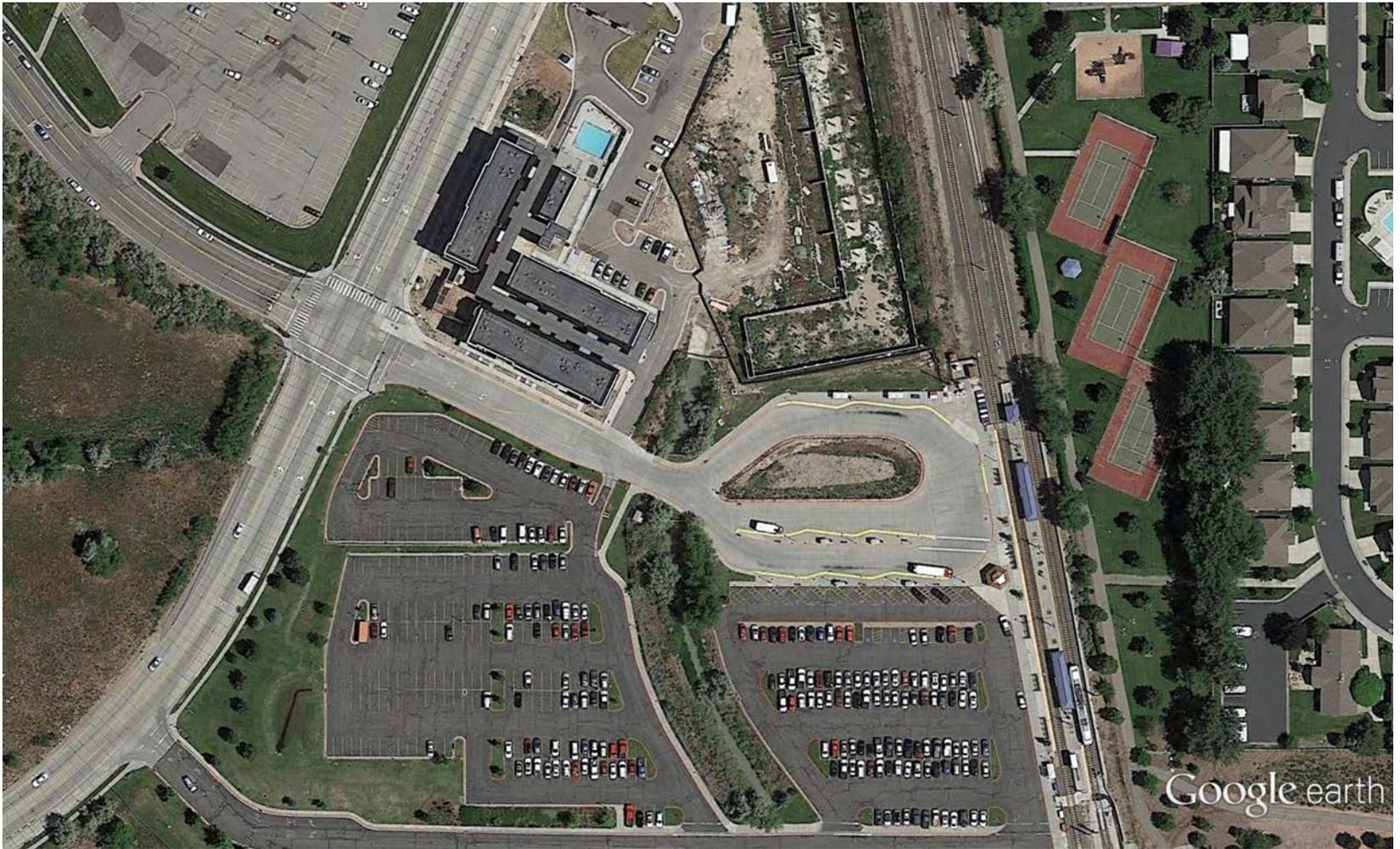
The Future of Active Transportation



Infrastructure



Land Use



Potential for Transit-Oriented Development

Land Use

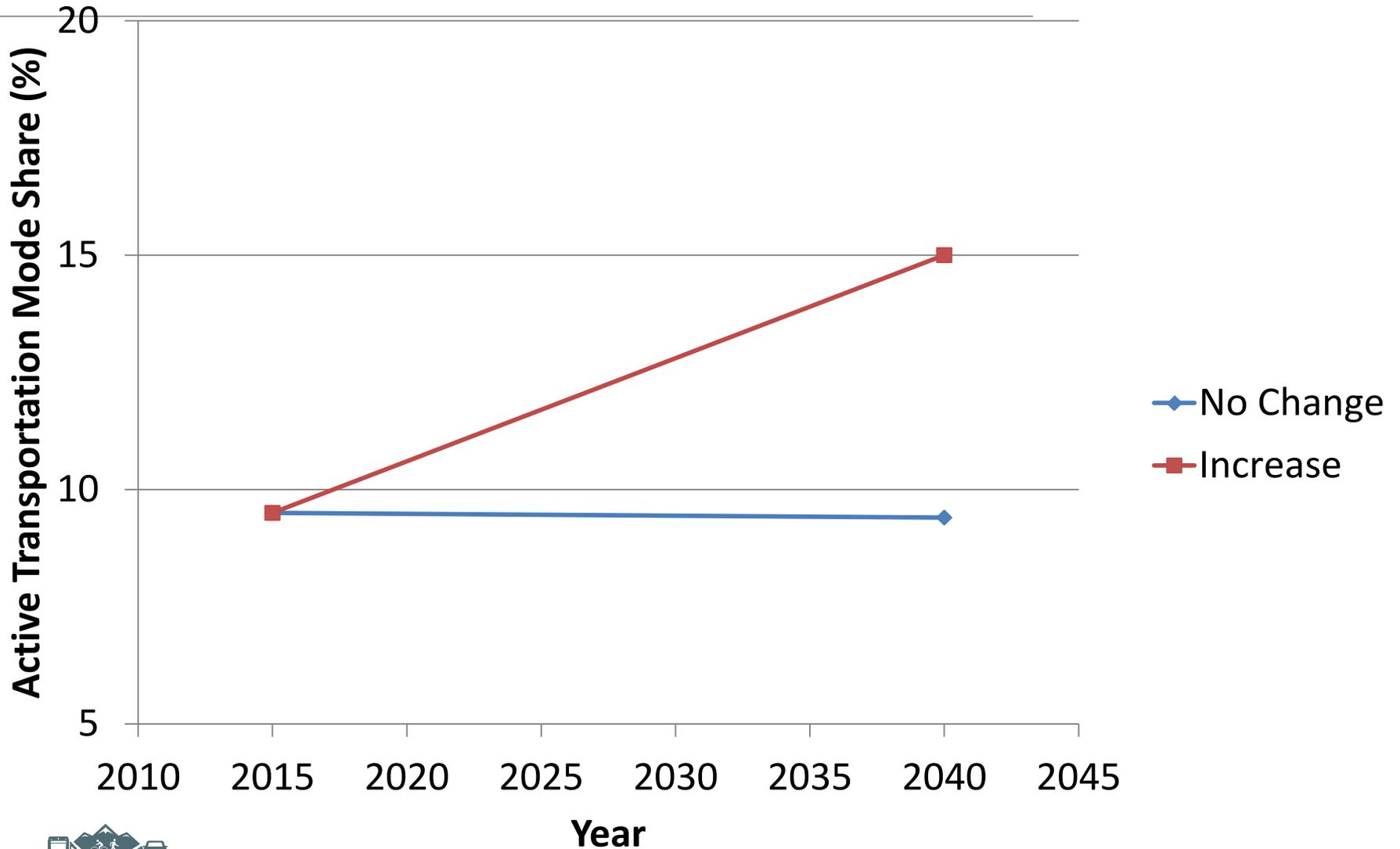


Potential for Transit-Oriented Development

Other Trends



What Could the Future Look Like?



Why Not Higher?



Boston, MA vs. Salt Lake City, UT

Why Not Higher?



Transportation in Copenhagen

How the Salt Lake City Region will Maximize Walking & Biking

UTA breaks ground on first-ever transit-oriented development in Sandy

Like 27 Tweet 16 Pin it Share 14

09/29/2014 09:13 PM 09/29/2014 10:48 PM



SANDY, Utah (ABC 4 Utah) - Utah's first ever transit-oriented development project (TOD) is officially underway in Sandy.

In this first of its kind project, the Utah Transit Authority is partnering up with Hamilton Partners, a real estate development company, to build a 1,200 unit apartment complex that will also include retail and commercial office space. The \$46 million phase one will include 271 units and is expected to be completed by next year.

Bruce Bingham, with Hamilton Partners, explained, "It combines not only a TRAX station but retail, apartments and office buildings in a very dense format. Sometimes communities are concerned about density Sandy has embraced it as an opportunity to bring the community more tightly knit together."



FREE WITH EVERY PASSENGER CAR
& LIGHT TRUCK TIRE PURCHASE

CLICK HERE FOR MORE DETAILS

Development
that is....
~~Transit-Oriented~~
Life-Oriented

Good 4 Utah, September 29, 2014



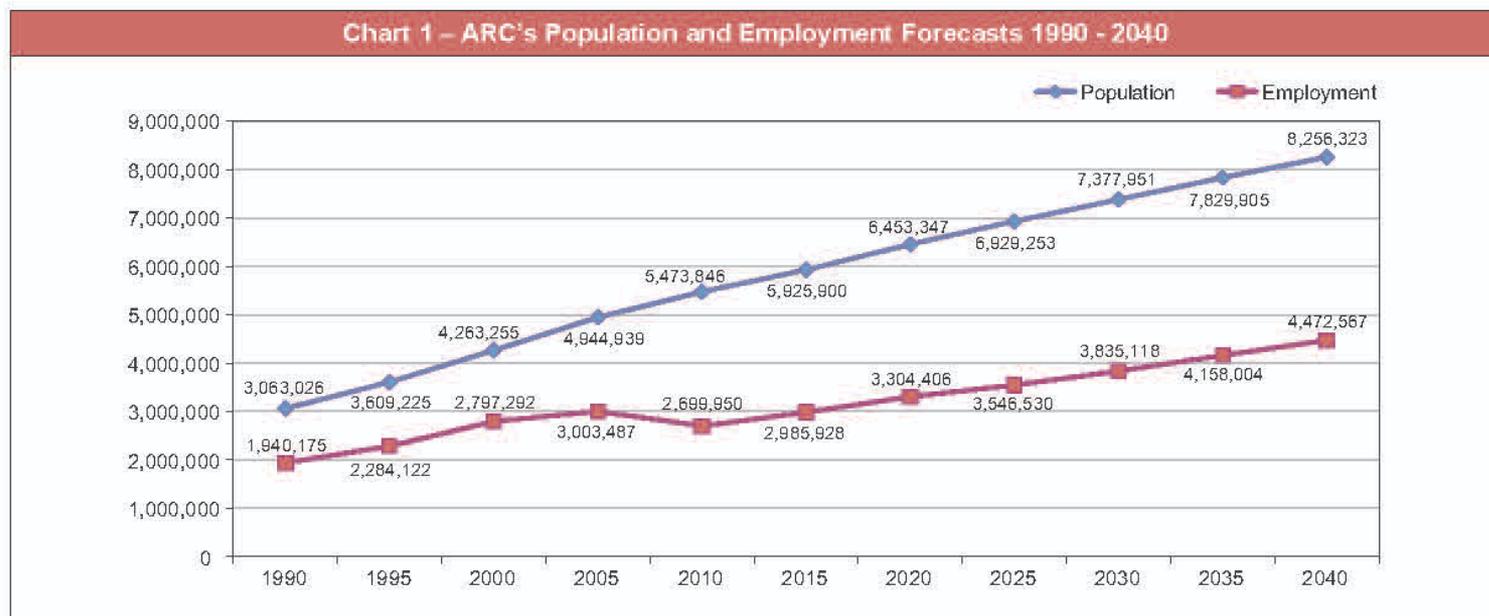
**Nate Conable
Fehr & Peers**

Land Use and
Transportation



Land Use and Transportation In Atlanta

- Atlanta Grew Rapidly Between 1990 and 2000
- Strong local control of land use decisions
- 3 Ideas/Approaches to managing land use-transportation connection are born in response



Land Use and Transportation In Atlanta

- State of Georgia
 - Formed Georgia Regional Transportation Authority
- Atlanta Regional Commission
 - Implemented Livable Centers Initiative Program
- City of Atlanta
 - Atlanta BeltLine Program Is Conceptualized



Georgia Regional Transportation Authority

- Developments of Regional Impact
 - 400 projects since Year 2000
 - Triggered by development scale



Cumberland/Galleria Area at the confluence of I-75 and I-285 eight (8) miles north of Atlanta and site of the new Atlanta Braves Stadium



REGIONAL REVIEW FINDING

Atlanta Regional Commission • 40 Courtland Street NE, Atlanta, Georgia 30303 • ph: 404.463.3100 • fax:404.463.3105 • www.atlantaregional.com

DATE: May 3 2006

ARC REVIEW CODE: R604061

TO: Mayor Shirley Franklin
ATTN TO: Harry Boxler, Principal Planner
FROM: Charles Krautler, Director

NOTE: This is digital signature. Original on file.

The Atlanta Regional Commission (ARC) has completed regional review of the following Development of Regional Impact (DRI). Below is the ARC finding. The Atlanta Regional Commission reviewed the DRI with regard to conflicts to regional plans, goals, and policies and impacts it might have on the activities, plans, goals, and policies of other local jurisdictions and state, federal, and other agencies. The finding does not address whether the DRI is or is not in the best interest of the local government.

Submitting Local Government: City of Atlanta

Name of Proposal: Piazza at Paces

Review Type: Development of Regional Impact

Date Opened: Apr 6 2006

FINDING: After reviewing the information submitted for the review, and the affected agencies, the Atlanta Regional Commission finding is that the DRI is in the best interest of the Region, and therefore, of the State.

Additional Comments: The Piazza at Paces is a proposed mixed use development consistent with the City of Atlanta's Regional Development Policies. The development proposes a mix of use including residential, office, and retail uses. The development takes advantage of an underdeveloped area and will accommodate employment and population growth within the City more efficiently.

THE FOLLOWING LOCAL GOVERNMENTS AND AGENCIES RECEIVED NOTICE

ARC LAND USE PLANNING	ARC TRANSPORTATION PLANNING	ARC ENVIRONMENTAL PLANNING
ARC DATA RESEARCH	ARC AGING DIVISION	GEORGIA DEPARTMENT OF TRANSPORTATION
GEORGIA DEPARTMENT OF NATURAL RESOURCES	GEORGIA DEPARTMENT OF TRANSPORTATION	FULTON COUNTY
CITY OF ATLANTA SCHOOLS	DEKALB COUNTY	CORB COUNTY

If you have any questions regarding this review, Please call Mike Alexander, 463-3302. This finding will be published to the ARC website.

The ARC review website is located at: <http://www.atlantaregional.com/queries>

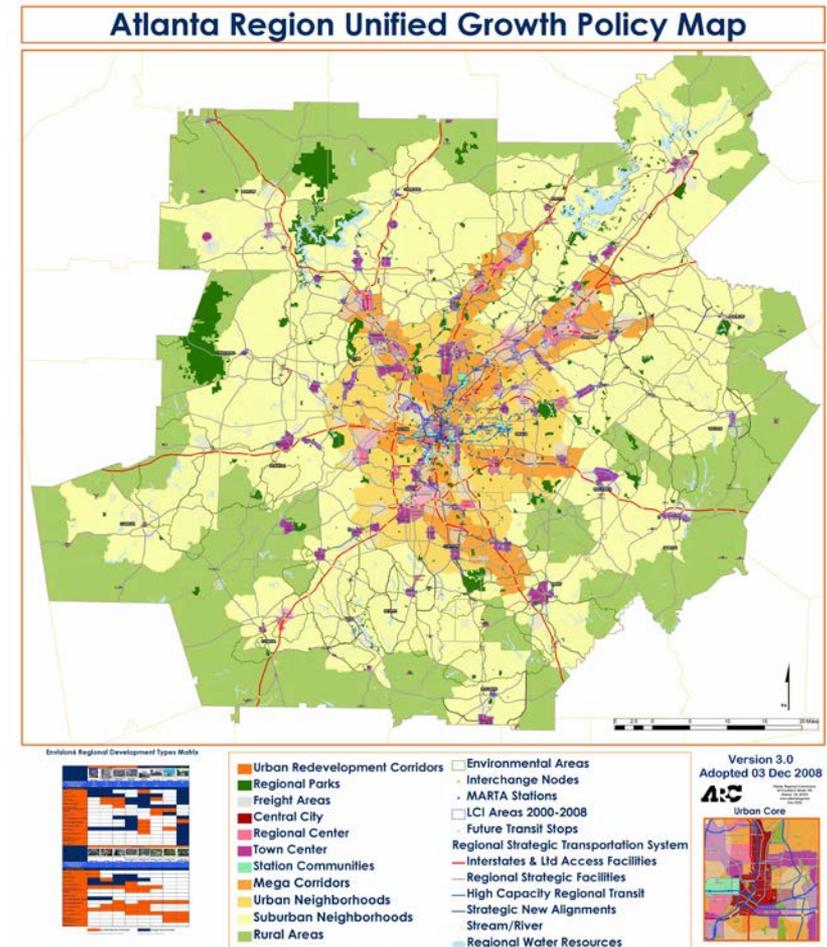


Georgia Regional Transportation Authority

- Potential applicability to Wasatch Front Corridor Study
 - State and takes a more direct role to coordinate land use and transportation impacts analysis?
 - Implement development requirements that locals or developers must address?
 - Require TDM measures?

Livable Centers Initiative

- Competitive Funding Program:
 - \$1M a year for last 15 years
 - \$500M in funding allocated for transportation improvements from plans through 2030
- Awarded based on ability to address livability goals
- Must be a Center or Corridor as identified by MPO



Perimeter Center Parkway – before

Before





 Source: Atlanta Regional Commission, 2015

Decatur MARTA Plaza – before



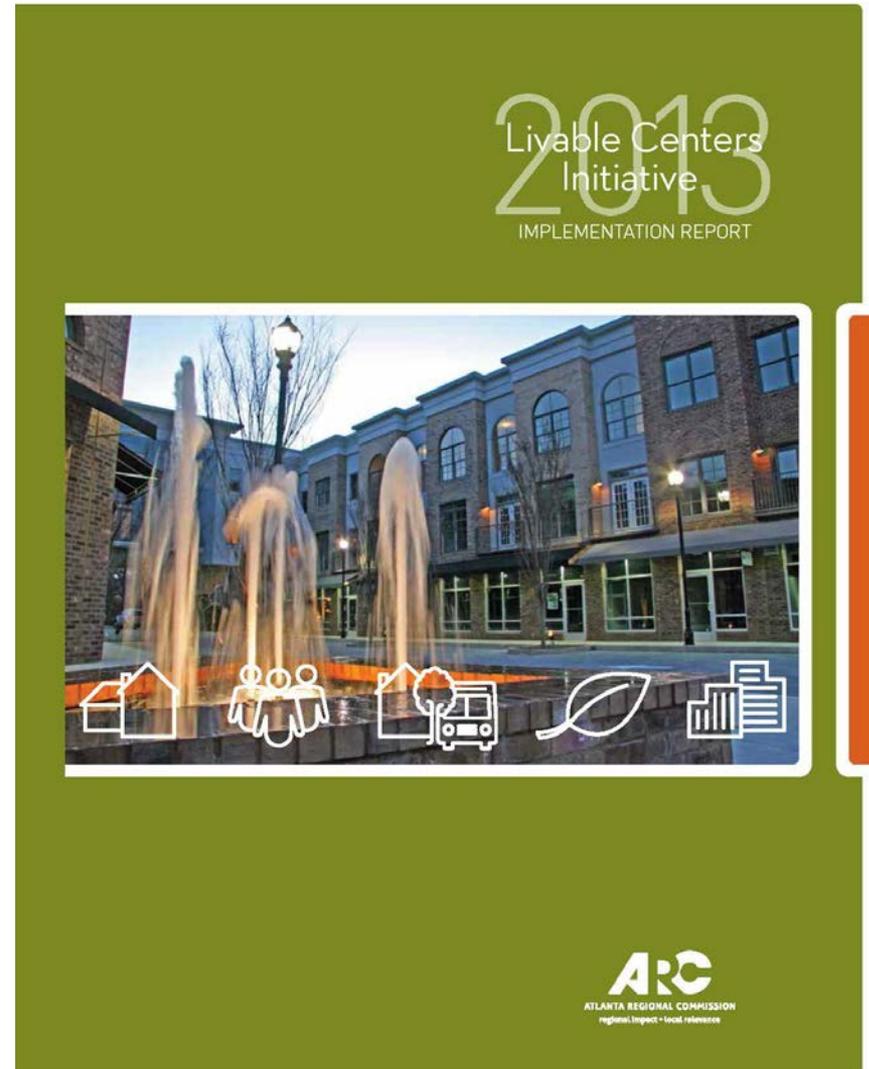


Source: Atlanta Regional Commission, 2015



Livable Centers Initiative

- Potential applicability to Wasatch Front Corridor Study
 - Expand and/or modify on the Local Planning Resource Program
 - Dedicate funding to project arising from plans
 - MPO delivers projects or provides project delivery assistance.



The Atlanta BeltLine

- Comprehensive \$4.5B mobility and economic development program
- Redevelop areas of the City that can be served by transit, biking and walking
- Led by a single dedicated agency
- Corridor vision is to be a destination for people and businesses







// Art on the Atlanta BeltLine



Atlanta
BeltLine

- Since inception, the project has grown more than 40%
- **September 2013:** Atlanta BeltLine Lantern Parade kicked off the exhibition with more than 10,000 participants



12/18/2013

Atlanta BeltLine // © 2013

Page 24



The Atlanta BeltLine

- Lessons learned
 - Provide a diversified and dedicated set of funding sources
 - Define roles and responsibilities clearly, where there is overlap
 - Federal agencies must be brought along to understand the governance structure
 - Treat the corridor as a place for people and a transportation facility

**Don Samdahl
Fehr & Peers**

Corridor Pricing
and Management



Corridor Management Strategies to Consider

- Active Transportation and Demand Management (ATDM)
- Managed Lanes
- Congestion Pricing
- Integrated Corridor Management

Active Transportation and Demand Management (ATDM)



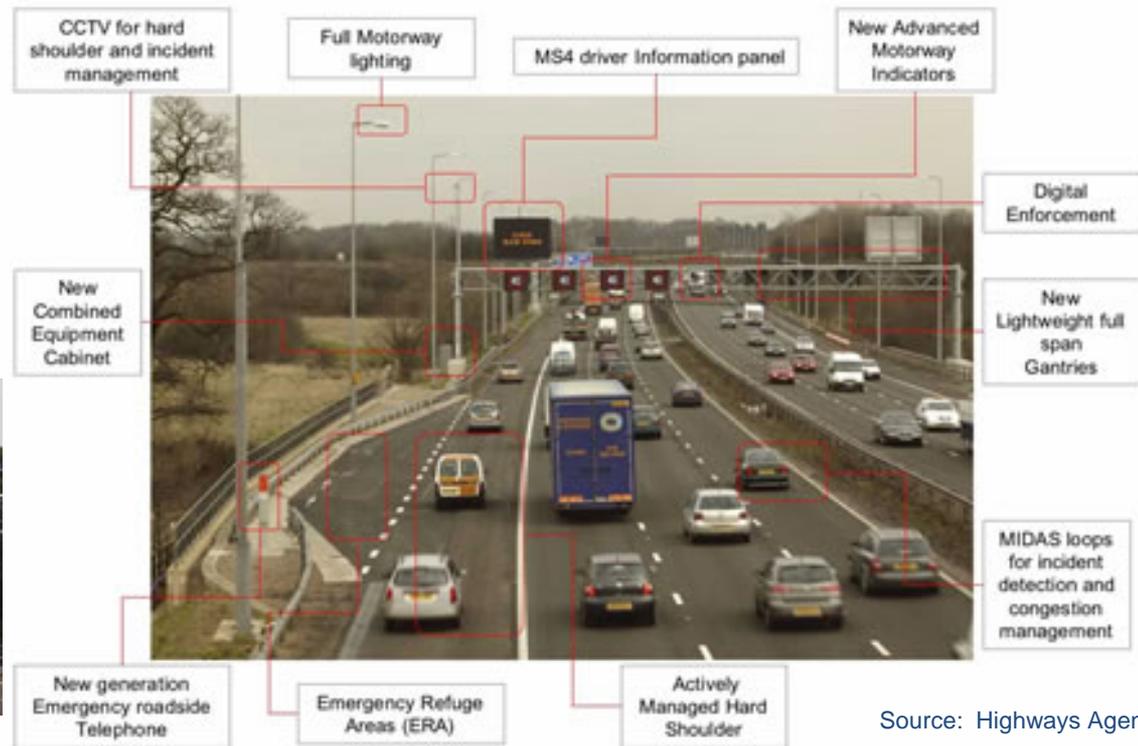
<p>Variable Speed Limits</p>	<p>Manual operation based on identification of conditions</p>	<p>Automated operation based on pre-defined thresholds</p>	<p>Automated operations based on predicted travel conditions</p>
-------------------------------------	---	--	--



ACTIVE TRAFFIC MANAGEMENT on M42 – UK



- Use of hard shoulder
- Break-down areas
- Driver info panels
- Speed control
- Photo enforcement
- CCTV



Source: Highways Agency

SPECIAL LANES IN THE NETHERLANDS

- Rush hour lanes
 - Use of hard shoulder running
 - Peak period operations
 - Good safety record
- Plus lanes
 - Add extra narrow lane
 - Reduced speed
- Reversible tidal-flow lane
- Exclusive bus and truck lanes



Types of Managed Lanes

Access	Ramp controls; Express Lanes
User Eligibility Requirements	HOV-only, truck-only
Pricing	Congestion Pricing

Types of Congestion Pricing

1. ***Priced lanes:*** HOT or Express Toll lanes
2. ***Priced highways***
3. ***Priced zones:*** Area or cordon
4. ***Fully priced road networks:*** Commercial vehicles or all vehicles
5. ***Pricing not involving tolls:*** Parking and insurance

Primary Benefits of Pricing

1. ***Manages demand:*** Balances demand with supply
2. ***Generates “some” revenue*** for transportation investment

1. Priced Lanes



2. Priced Highways

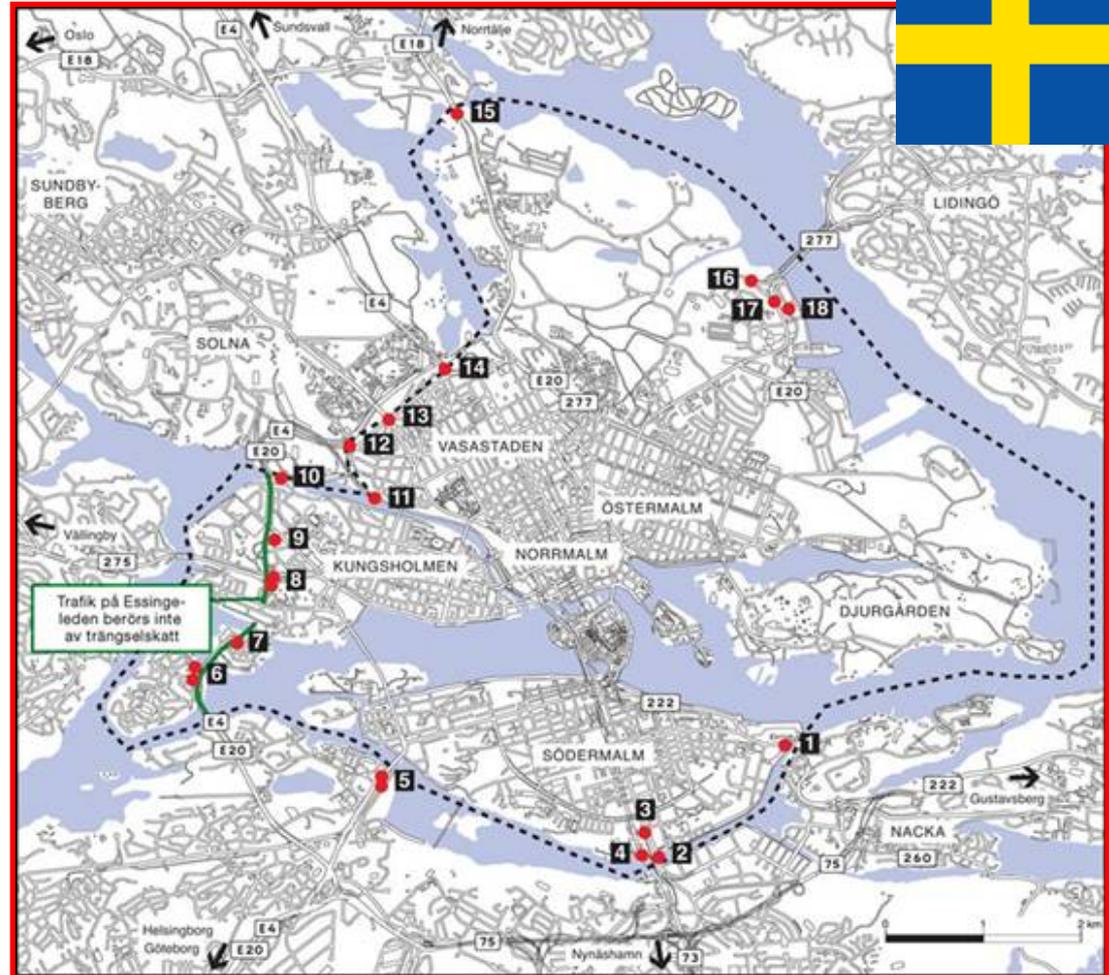


3. Priced Zones

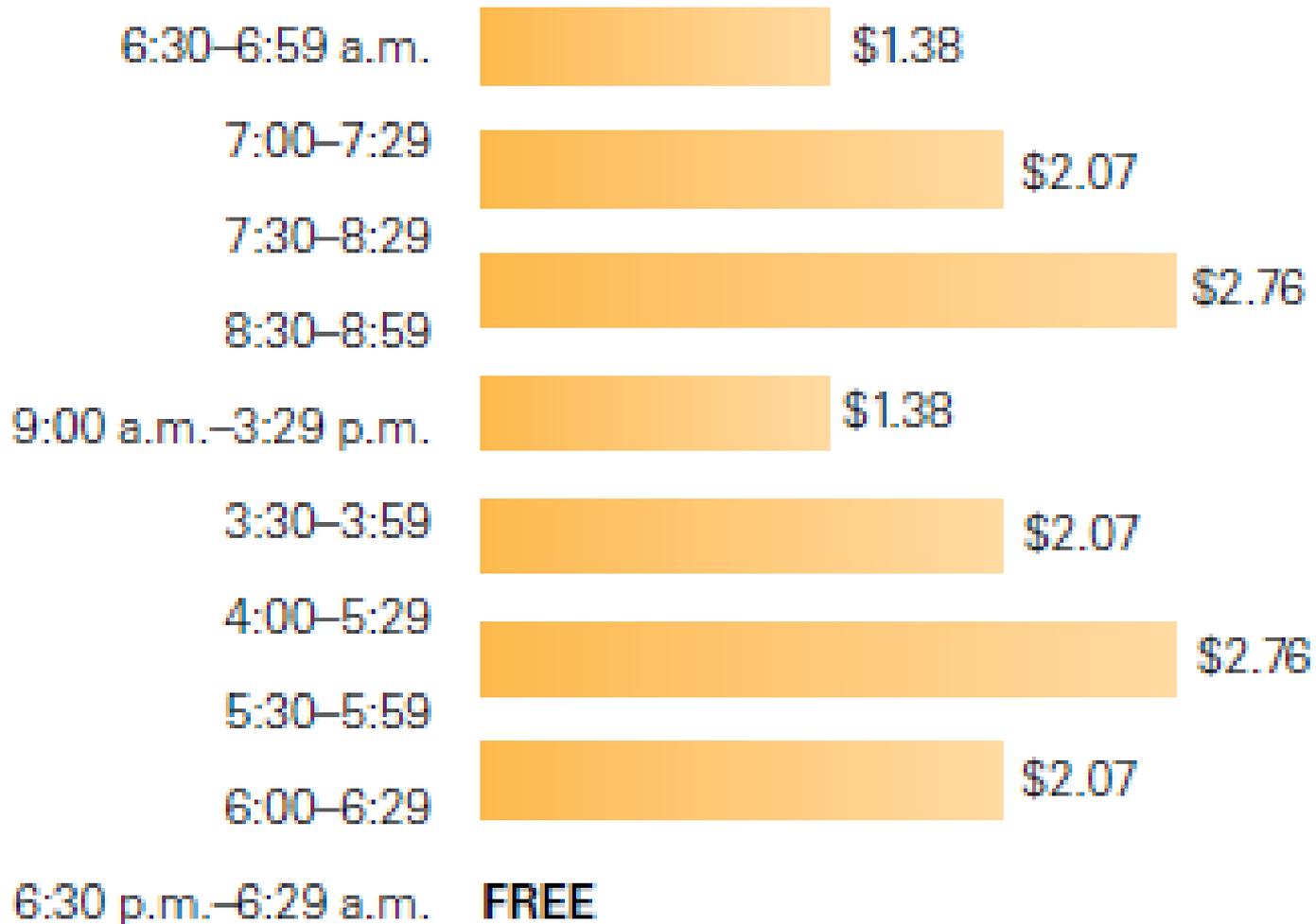


Stockholm Cordon Pricing:

- Cordon around center city
- Charges to enter and to leave central Stockholm



Stockholm's Cordon Toll Rates



New York City's Previous Proposal

- Cordon around Midtown and downtown Manhattan.
- Annual *net* revenue:
 - \$500 million
 - Dedicated to transit

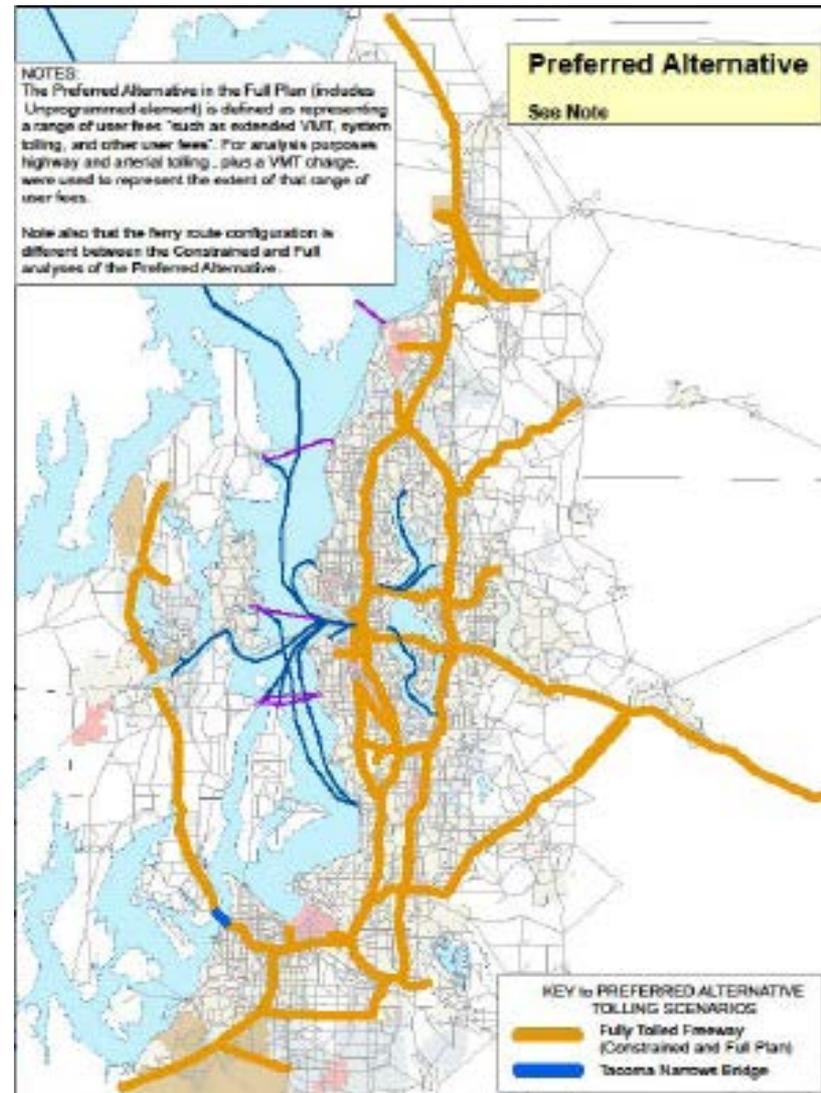


4. Fully Priced Road Networks

Trucks only	All vehicles
<ul style="list-style-type: none">•Germany•Switzerland•Austria•Hungary•Czech Republic	<ul style="list-style-type: none">•Singapore (expressway system)•US. metropolitan areas (planned):<ul style="list-style-type: none">•Seattle (Full facilities)•San Francisco and Atlanta (Lanes only)

Long Range Plan: Seattle, WA

- Entire freeway system (all lanes) will be tolled
- Variable tolls will be used to manage demand



5. Pricing Not Involving Tolls

Parking Pricing

- San Francisco – Curbside and Off-street



Mileage-based User Fees

- Pilots in Oregon and Washington

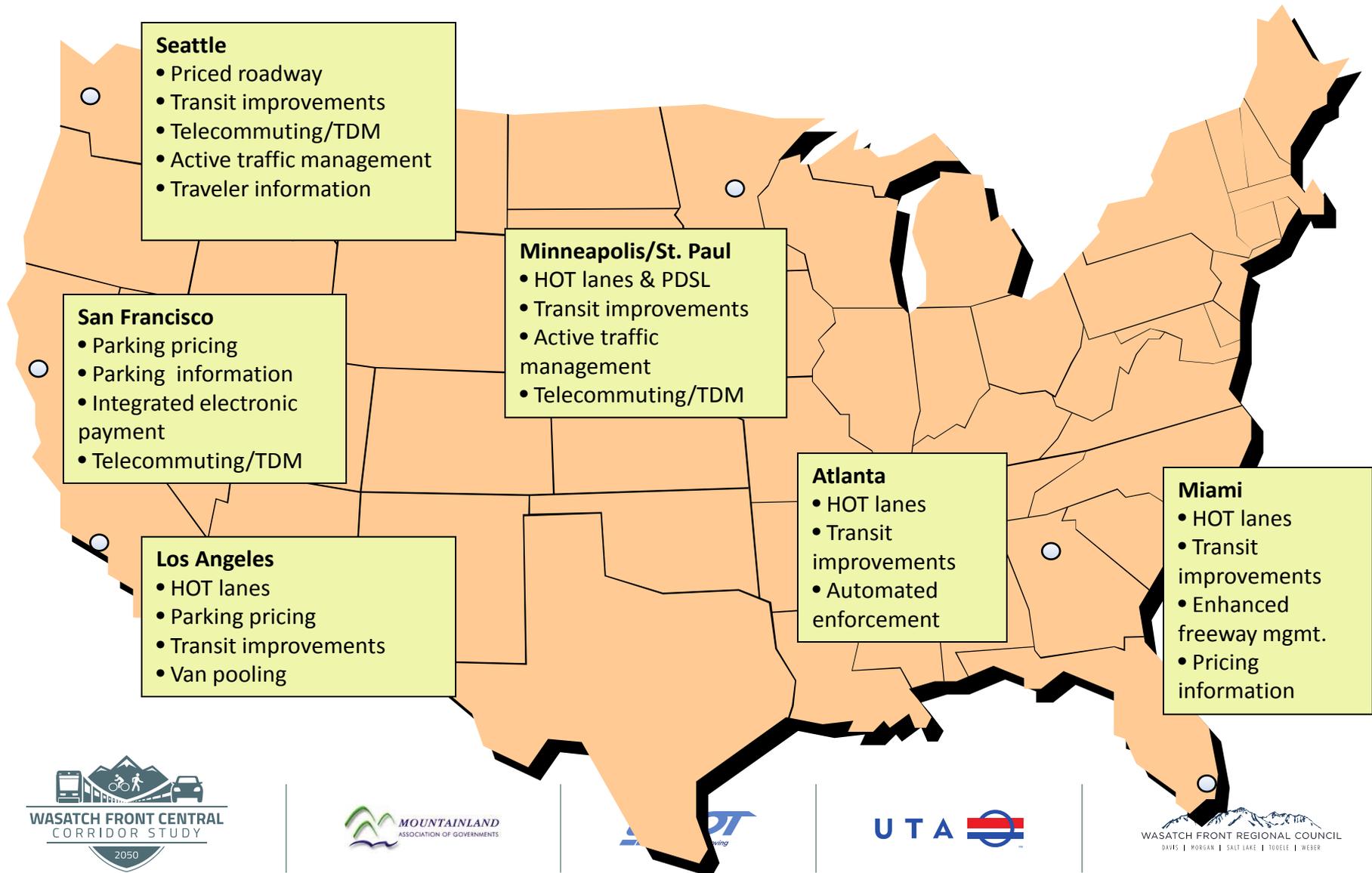
Mileage-based car insurance

- Several pilots

Employer-based parking cash-out

- Several California examples

Integrated Corridor Management

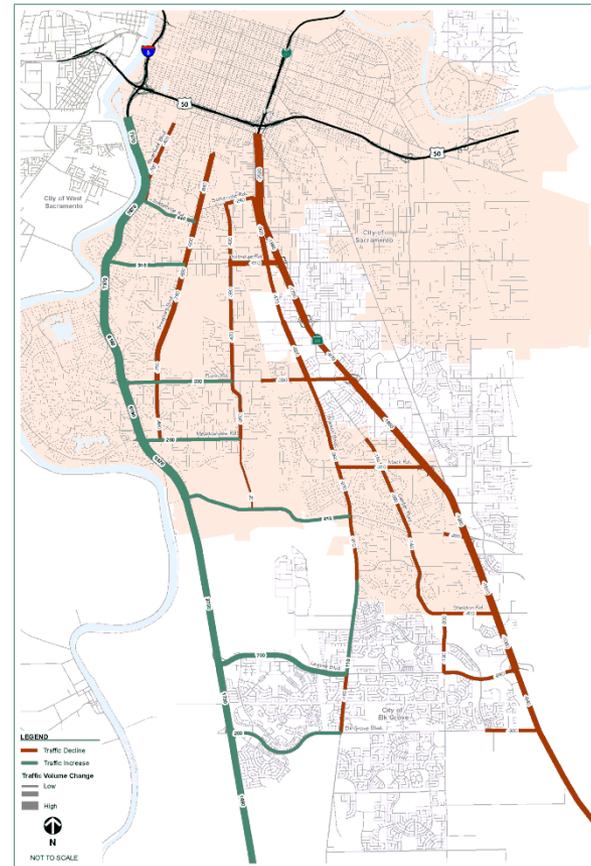


Why an Integrated Corridor Approach?

Demand shifts
within freeway



Demand affects
parallel facilities



fp
FEHR & PEERS
TRANSPORTATION CONSULTANTS

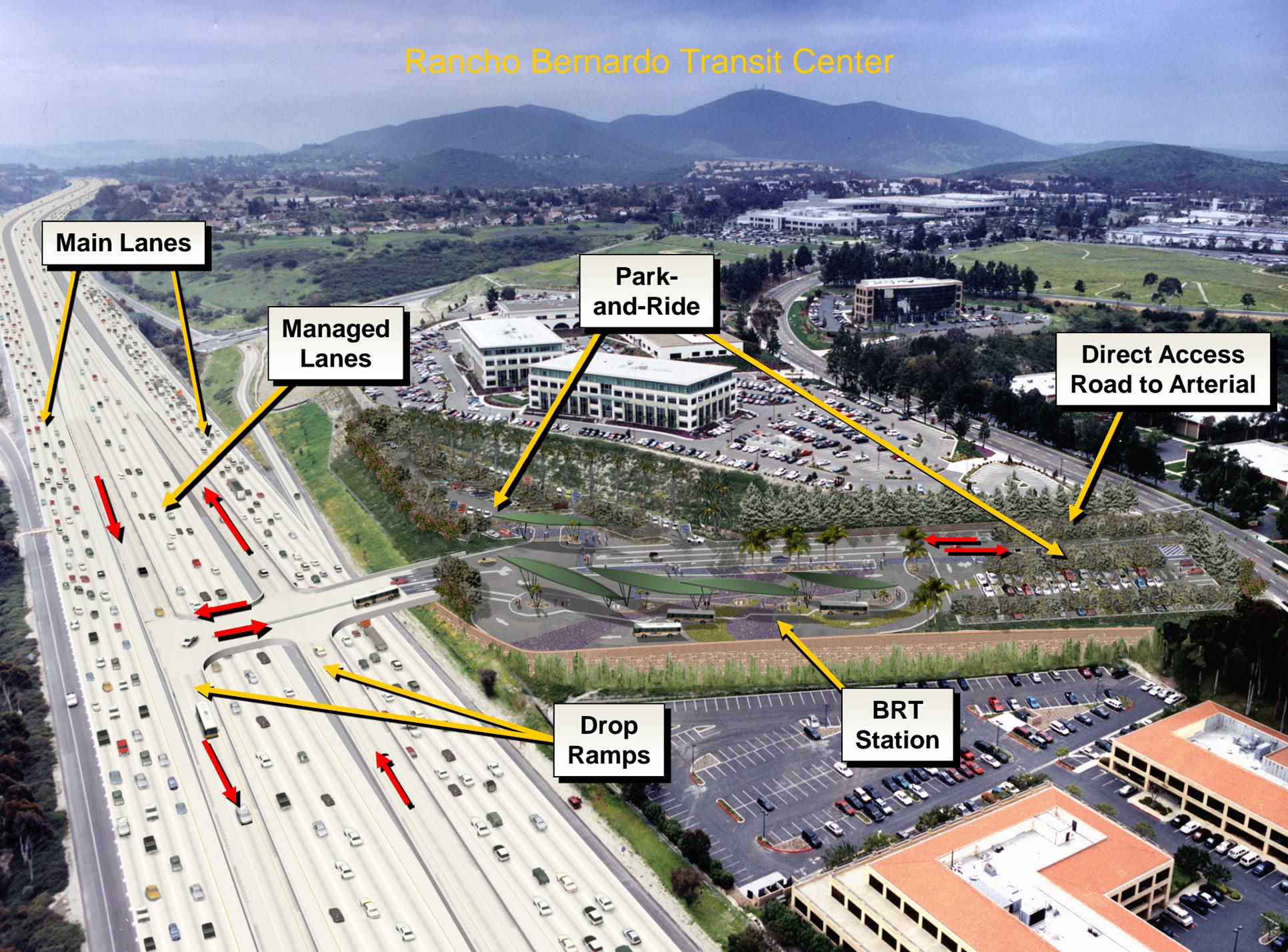
INDUCED TRAVEL ASSOCIATED WITH
I-5 BUS/CARPOOL LANE ALTERNATIVE
FIGURE 3

San Diego I -15 Corridor

- I-15 Managed Lanes System
- Multi Institutional Cooperation/Partnerships
- Multi-modal Transportation Improvement Strategies



Rancho Bernardo Transit Center



Main Lanes

Managed Lanes

Park-and-Ride

Direct Access Road to Arterial

Drop Ramps

BRT Station

Chris Williges HDR

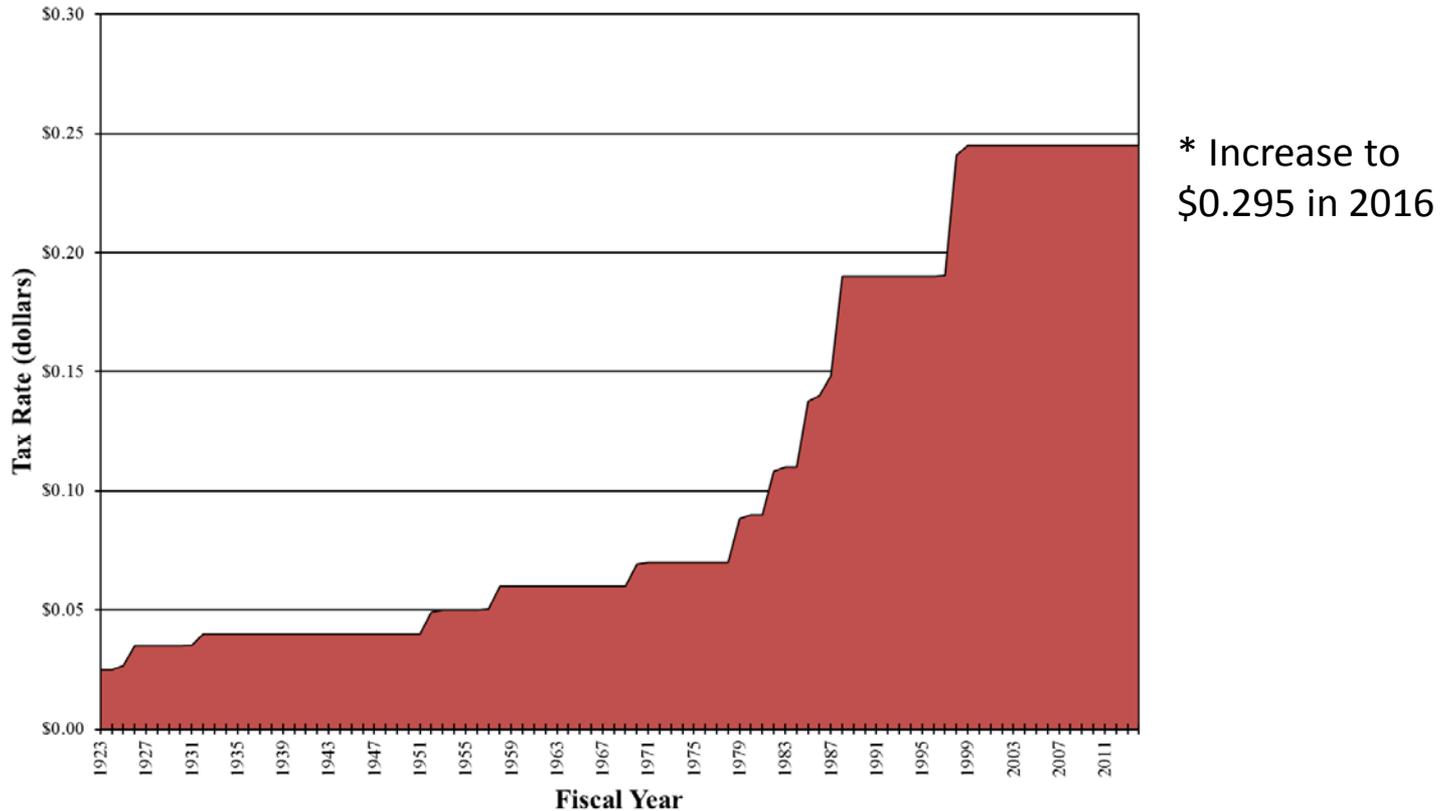
Economics in Transportation



Transportation Funding

- Rely on federal and state excise taxes
- Four trends:
 - No change in excise tax
(federal since 1993, state since 1997... until recently)
 - Slow to no growth in vehicle-miles traveled (VMT)
 - Inflation (general and construction costs)
 - Increasing fuel economy

Nominal Motor Fuel Tax Rate in Utah, 1923-2014

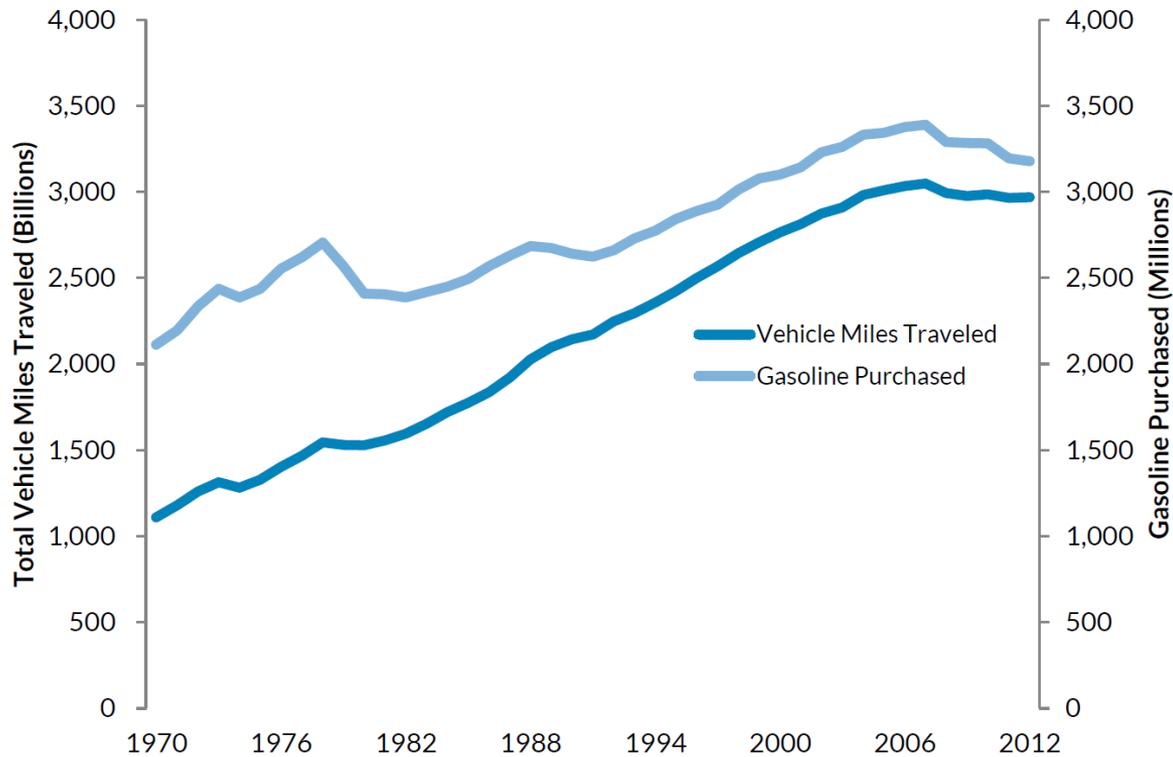


Source: Utah State Tax Commission, History of the Utah Tax Structure, December 2014

Gas Tax Increases/Reform

- 2013 – Six states (Maryland, Massachusetts, Pennsylvania, Vermont, Virginia, and Wyoming)
- 2014 – Two states (New Hampshire and Rhode Island)
- 2015 – Three states as of March (Iowa, South Dakota, Utah)
- Nine more states considering (Georgia, Idaho, Iowa, Michigan, Minnesota, Missouri, New Jersey, South Carolina, South Dakota, Tennessee, Utah, and Washington State)
- 24 have not increase in decade, 16 in two decades

US Vehicle Miles Traveled and Gasoline Purchased, 1970-2012

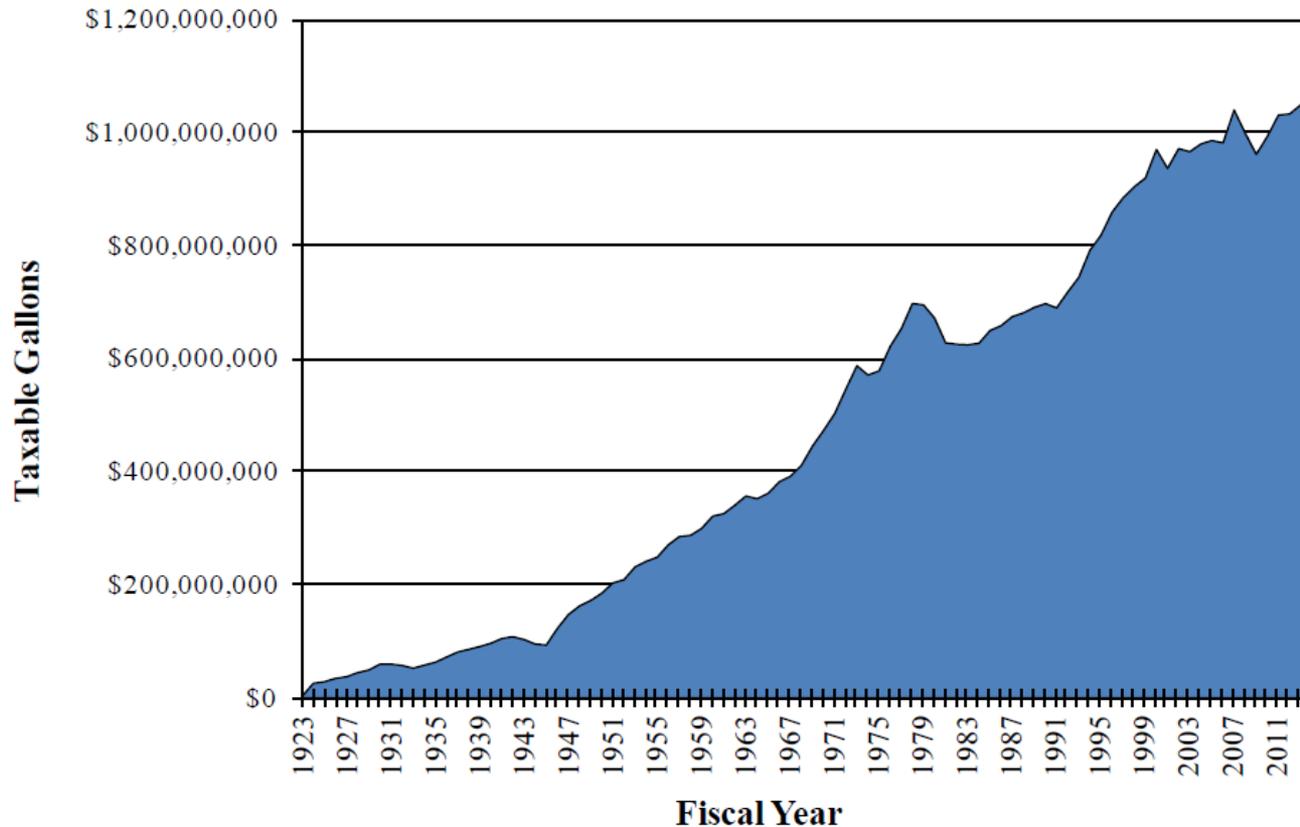


Sources:

Federal Highway Administration; U.S. Energy Information Administration.

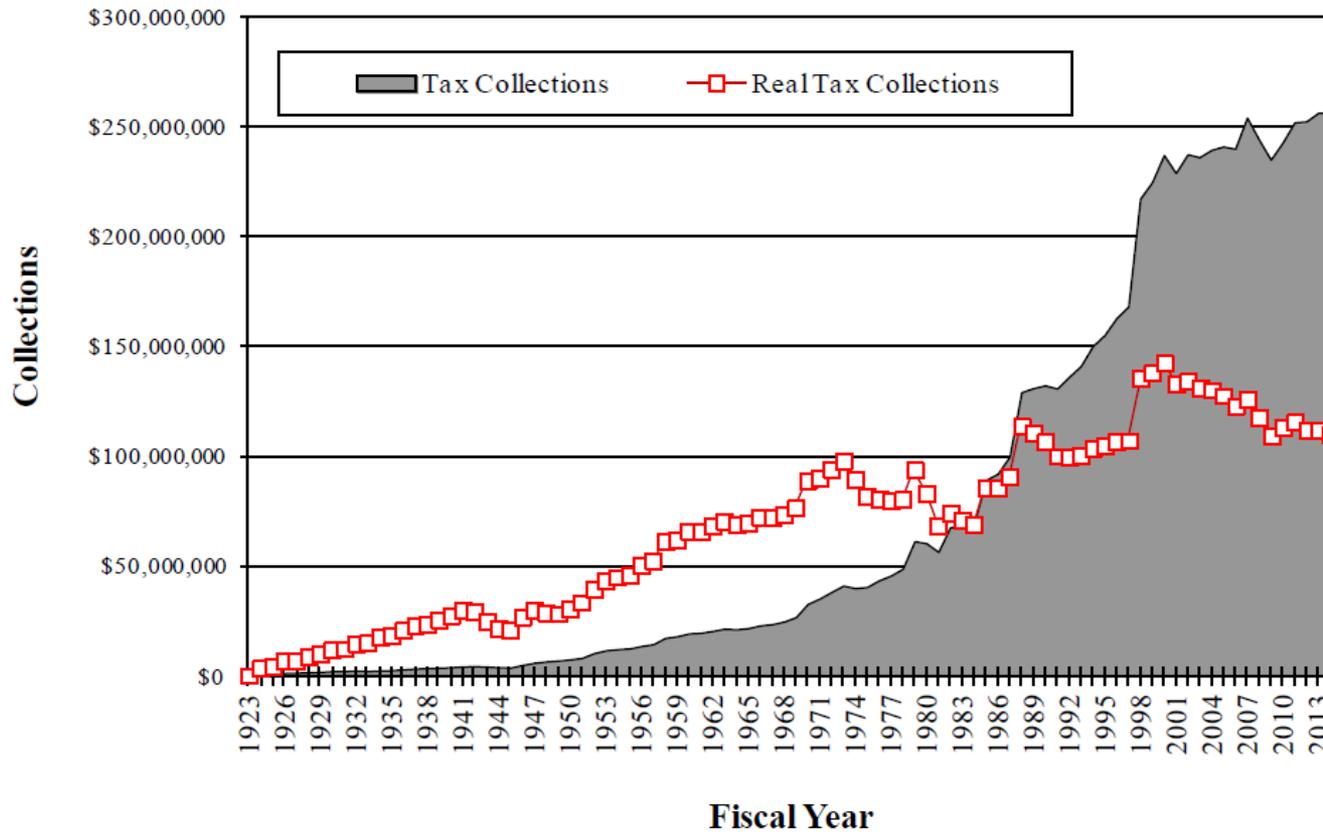
Source: Urban Institute and Tax Policy Center, *Reforming State Gas Taxes*, November 2014

Taxable Gallons of Motor Fuel Sold in Utah, 1923-2014



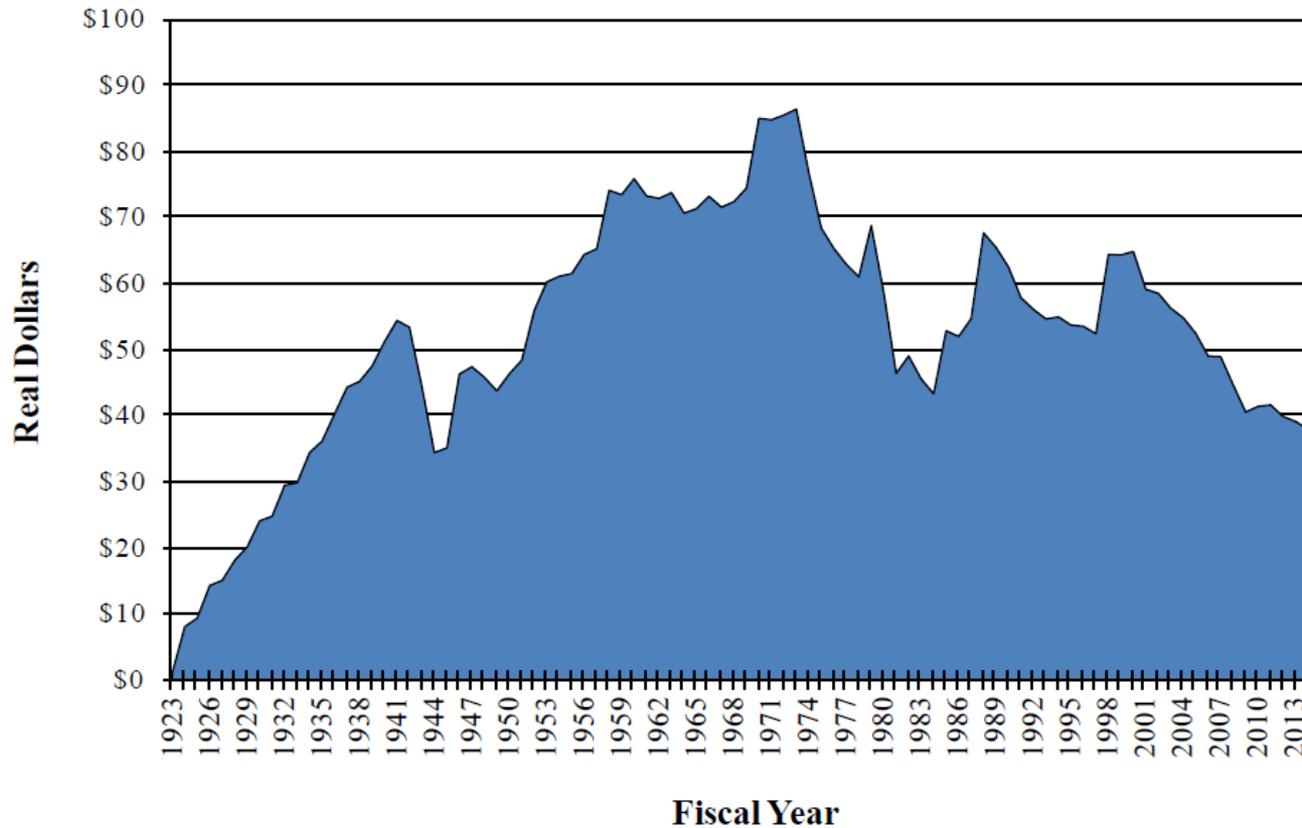
Source: Utah State Tax Commission, History of the Utah Tax Structure, December 2014

Motor Fuel Tax Collections in Utah, 1923-2014



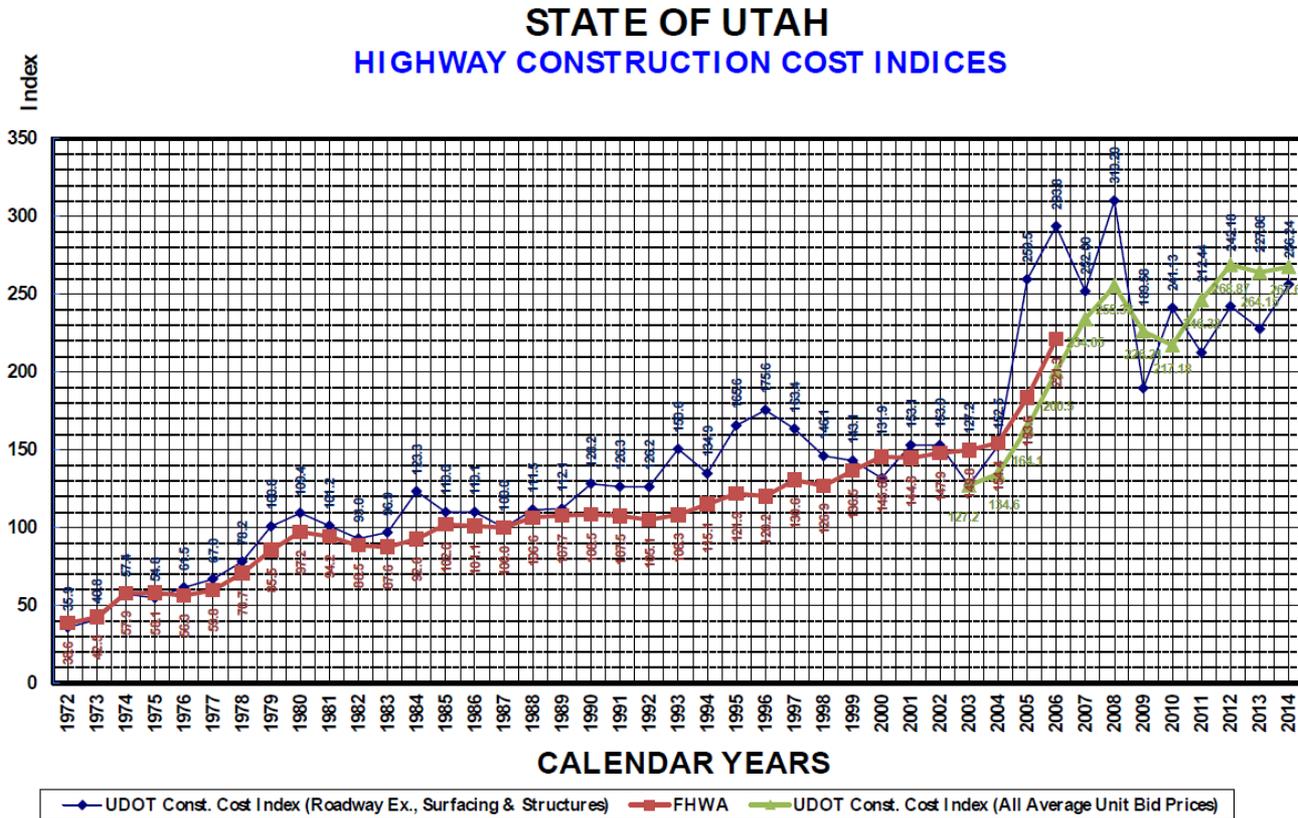
Source: Utah State Tax Commission, History of the Utah Tax Structure, December 2014

Real Motor Fuel Tax Collections Per Capita in Utah, 1923-2014



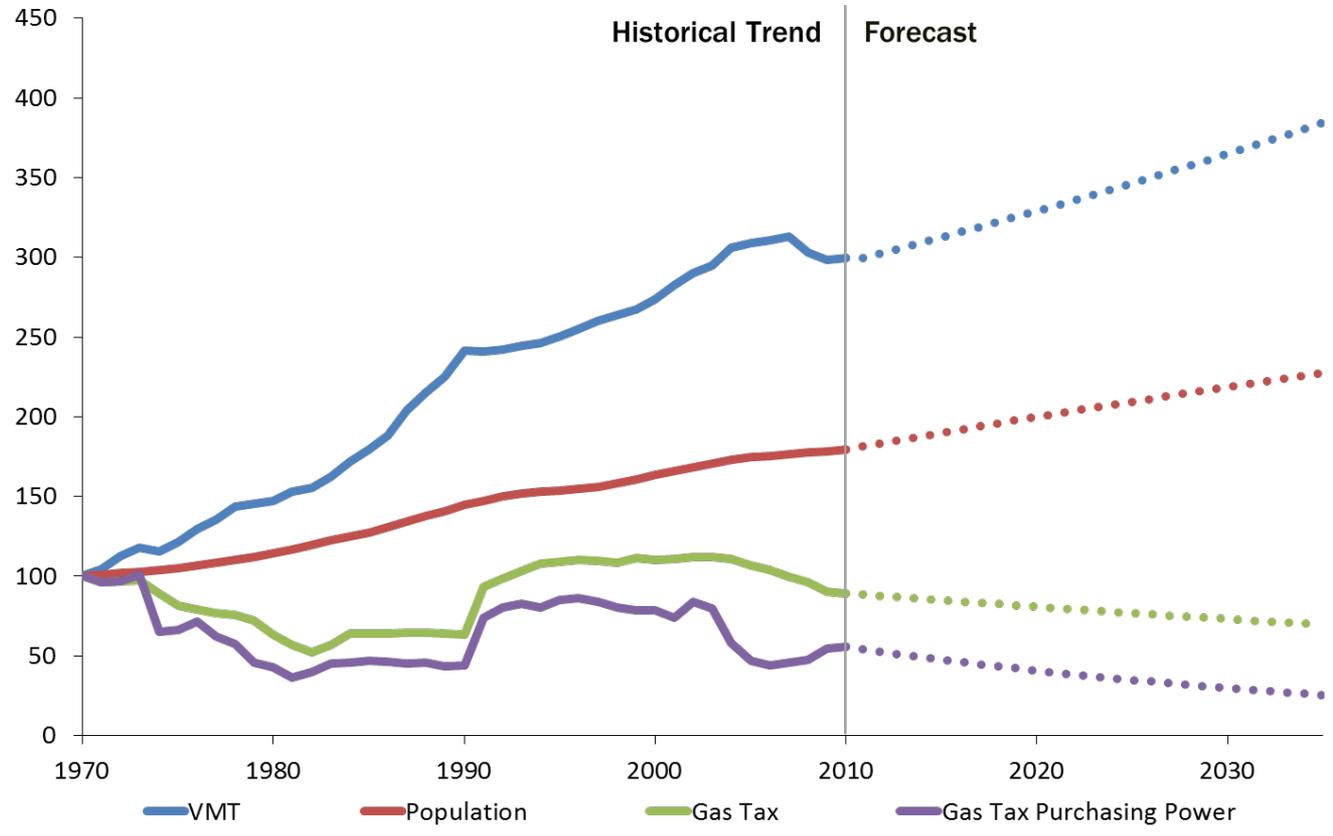
Source: Utah State Tax Commission, History of the Utah Tax Structure, December 2014

Utah Highway Construction Cost Index

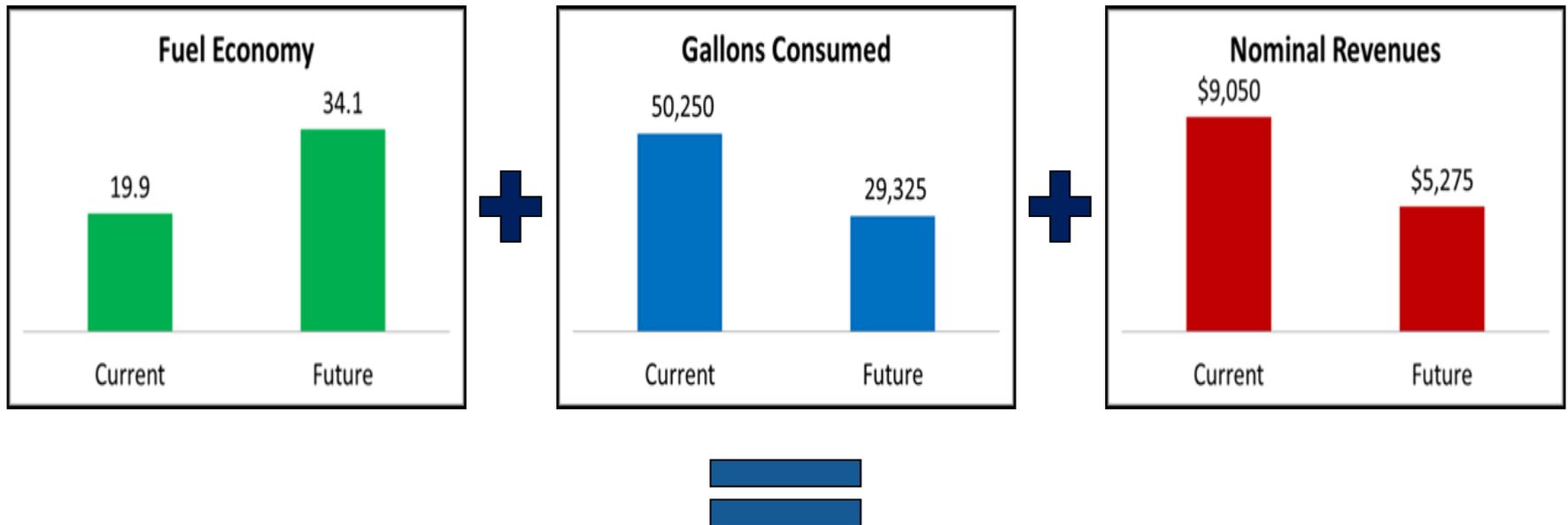


Source: UDOT Construction Cost Indices, April 30, 2015

Example from Southern California



Loss of Purchasing Power (inflation and fuel economy)



72% reduction in purchasing power
by 2035

What are cities and states doing?

- Fuel excise tax increases
- Federal interest in mileage-based fees
 - Oregon, Colorado, Washington State, California, etc.
- Increased local funding
- Alternative financing (P3)

Increase in Local Funding

- Many local options
 - Gas taxes (e.g., Nevada), vehicle license and registration taxes (e.g., Washington State), sales taxes, income and payroll taxes (Oregon for transit)
- Highest revenues from local sales tax
 - Important role in California
 - In 2005-06, roughly one-third of all local revenue per California Legislative Analyst's Office
- Roughly half of all transportation funding was local revenue in California in 2005-06

Country Transportation Sales Tax Measures in California

Transit Districts (Permanent 0.5% Taxes)

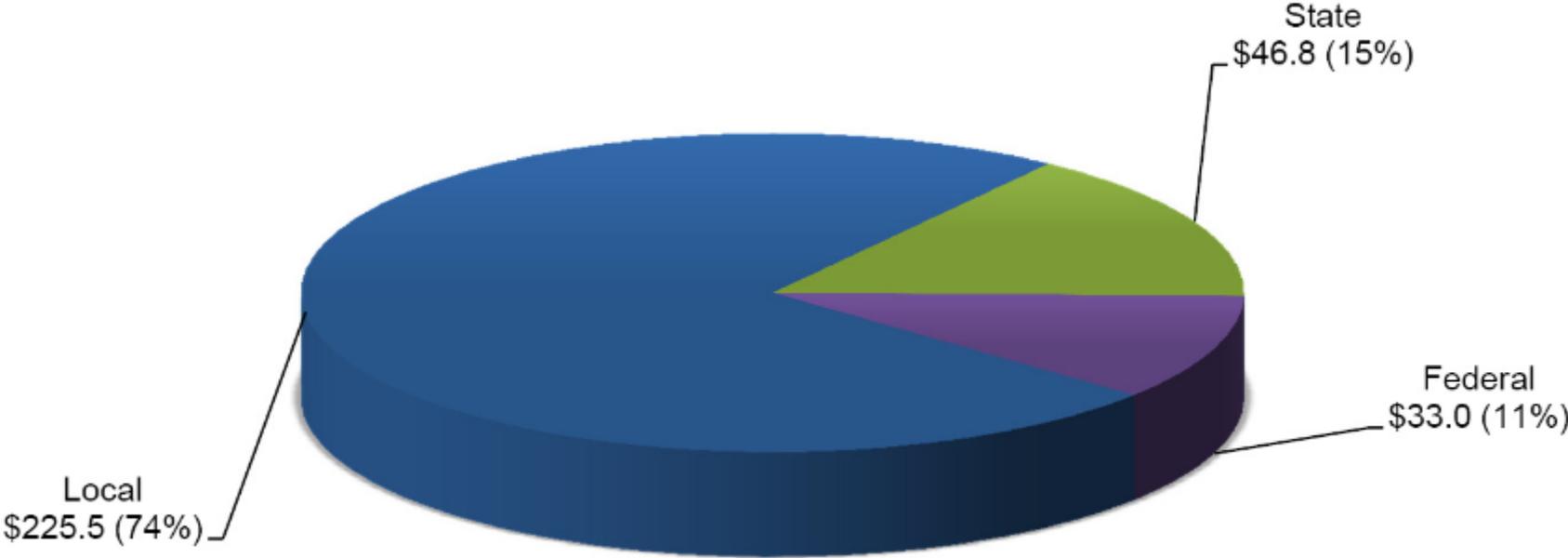
- BART (S.F., Alameda, Contra Costa)
- San Mateo
- Santa Clara
- Santa Cruz

“Self-Help” (Temporary 0.5% Taxes)

County	Duration	Est. 2014 Rev. (million \$)
Alameda	2002-2022	141
Contra Costa	1989-2034	75
Fresno	1987-2027	67
Imperial	1990-2050	13
Los Angeles (1% Tax)	Permanent	1,449
Los Angeles (Measure R)	2009-2039	725
Madera	1990-2027	8
Marin	2005-2025	25
Napa (Measure T)	2018-2043 (Est.)*	–
Orange	1991-2041	2
Riverside	1989-2039	160
Sacramento	1989-2039	107
San Bernardino	1990-2040	160
San Diego	1988-2048	262
San Francisco	1990-2034	89
San Joaquin	1991-2041	51
San Mateo	1989-2033	78
Santa Barbara	1990-2040	33
Santa Clara	1996-2036	211
Santa Clara (BART Ext 0.125%)	2013-2043 (Est.)	53
Sonoma (0.25% Tax)	2005-2025	21
Sonoma-Marín (SMART 0.25%)	2009-2029	33
Tulare	2007-2037	30
	TOTAL	\$3,793

Impact of Local Funding in Southern California

Figure 3.6 Core Revenues (in Nominal Dollars) \$305.3 Billion Total



Source: SCAG Revenue Model 2011
Note: Numbers may not sum to total due to rounding

Source: Southern California Association of Governments, 2012-2035 RTP/SCS

Utah Local Option Sales Taxes

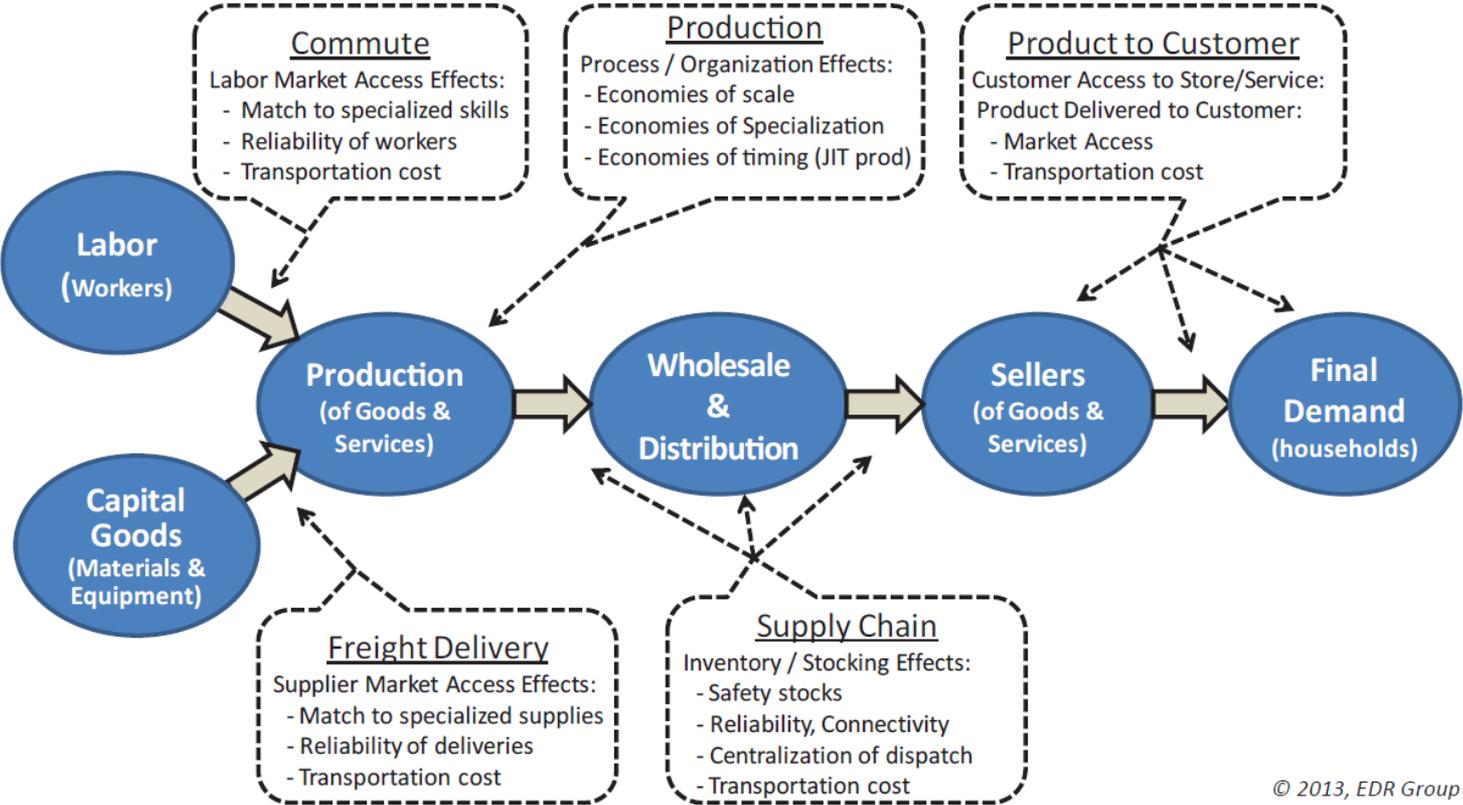
- H.B. 362 Sixth Substitute Transportation Infrastructure Funding
- Governor signed March 27, 2015
- Allows 0.25% local sales tax for highways and transit
- Specified splits by agency and mode
- Gas excise tax increase part of same bill

Greater Emphasis on Benefit-Cost Analysis



New research on travel time reliability (SHRP 2)

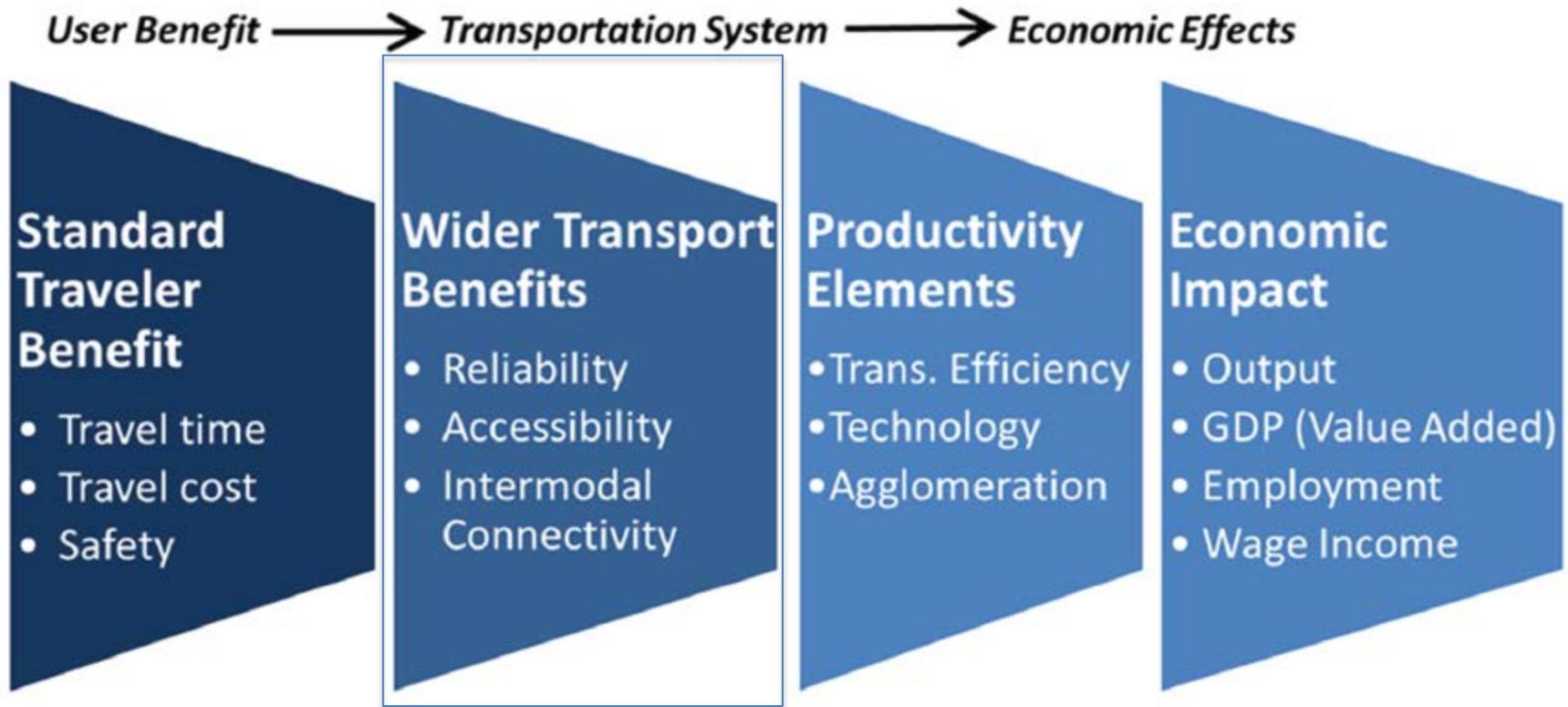
Recent Research on Economic Productivity



© 2013, EDR Group

Source: NCHRP Report 786

Focus on Wider Economic Benefits



Graphic © 2012, Economic Development Research Group

Stephen Lawe RSG

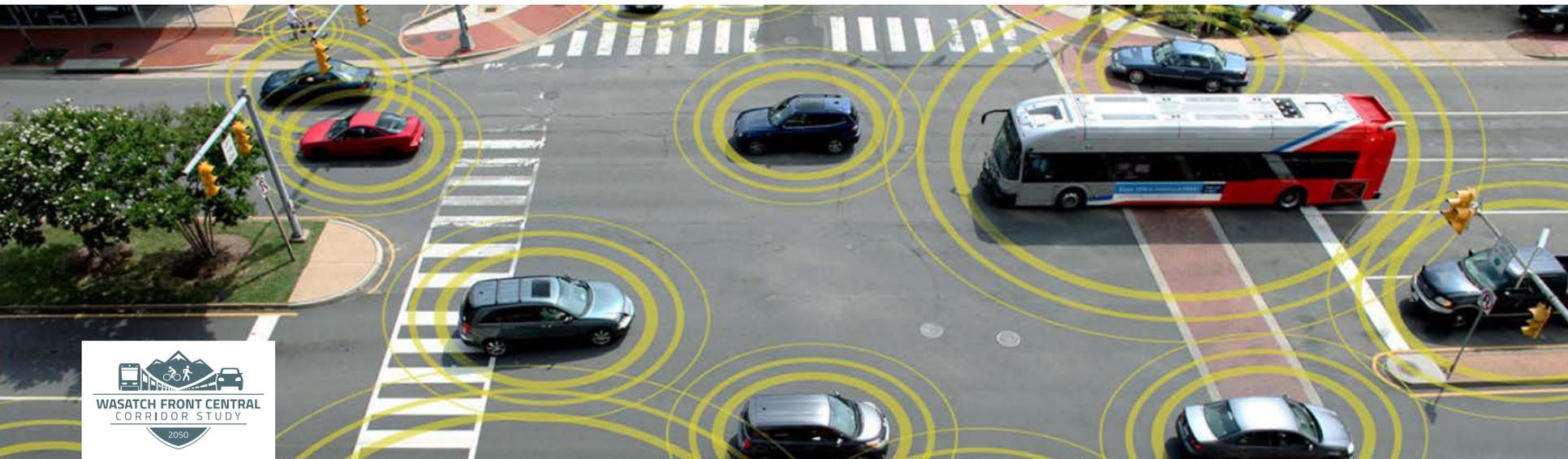
Disruptive Trends



part 2

VEHICLE EVOLUTION

Autonomous and connected vehicles and their impact on how we think about transportation planning



vehicle evolution. ■ AUTOMATED & AUTONOMOUS

AUTOMATED control (Requires Driver Activity Required)

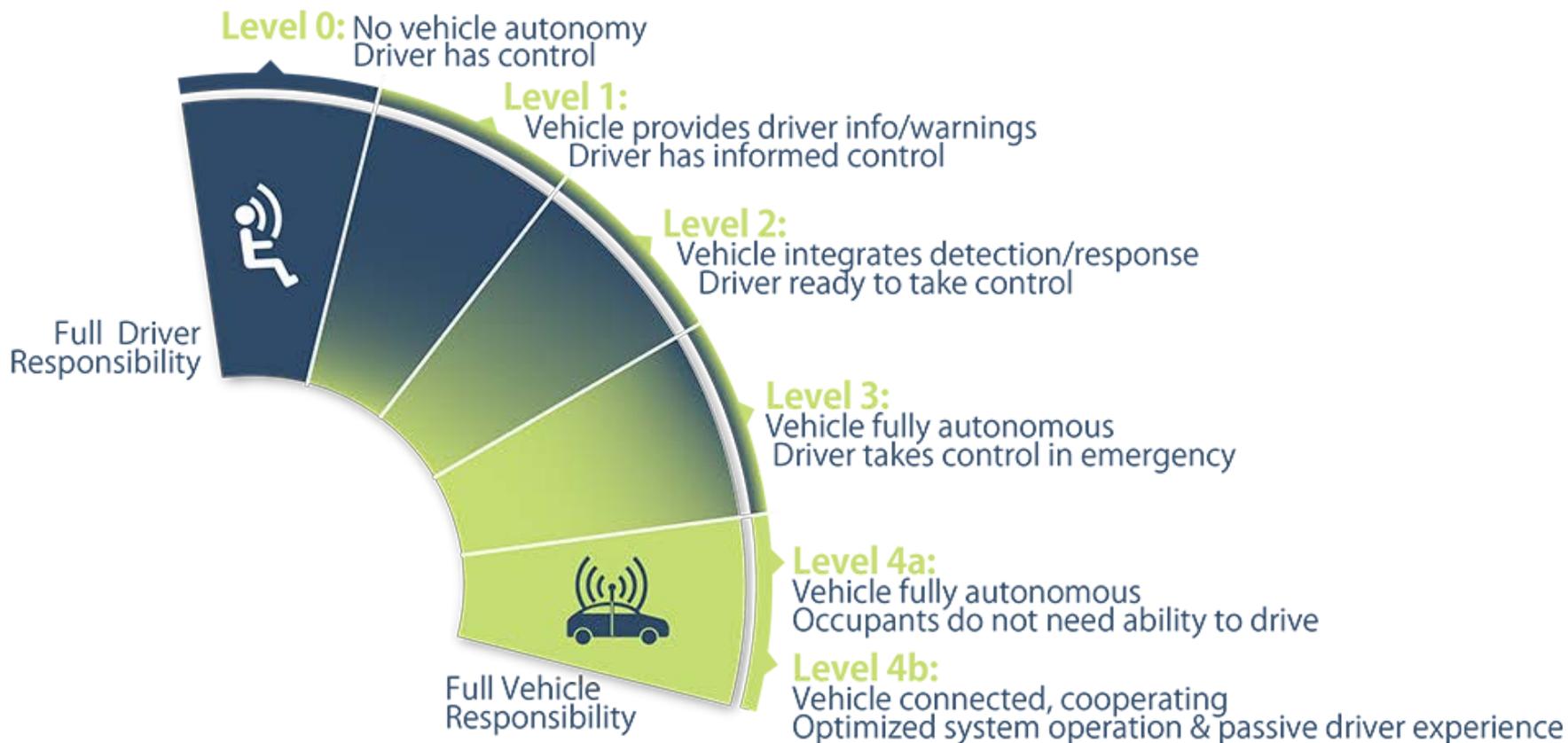
Executes several important driving activities such as lane changes, automatic braking and parking by leveraging advanced sensors but does not take the place of the driver.

AUTONOMOUS control (No Driver Activity Required)

Requires a complete driving experience under significant uncertainties in the environment for extended periods of time and the ability to compensate for system failures without external intervention

vehicle evolution

CONTINUUM OF AUTOMATION



vehicle evolution

SIGNIFICANT UNCERTAINTY

Renault Nissan Boss Says Autonomous Cars Could Be Ready By 2018

BY  NEIL WINTON | 442 years | 06/16/2014

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Renault Nissan CEO Carlos Ghosn with a Renault Leaf autonomous car prototype

IL-RES EASERY Renault Nissan CEO Carlos Ghosn with a Renault Leaf autonomous car prototype



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AUTOS 6/16/2014 @ 12:38 PM | 183 views

Autonomous Cars Like The Google May Be Viable In Less Than 10 Years

Comment Now Follow Comments

BRUSSELS, Belgium – President Barack Obama's motorcade, abetted by the limousine cavalcades of his G7 leader colleagues and non-stop rain, bought traffic to a standstill here this week, making those stranded in their cars or diving into the underground railroad system for relief wonder whether computer controlled cars might one day make this aggravation a thing of the past.

News of Google's autonomous car, which can transport two passengers around at speeds of up to 25 mph with the computer controlling the steering wheel and brakes, has set off speculation about just when this technology will be available.

Could it be with us in less than 10 years?

"Yes," says Peter Fuss, Germany based automotive specialist from the EY consultancy.

Fuss told the annual Automotive News Congress here that so-called autonomous driving will arrive in less than 10 years, spurred on by safety and comfort benefits.

"No," said other assorted experts at the conference, led by Volvo, who reckoned 10 to 15 years was more likely.

Everyone Will Have Self-Driving Car By 2026, Analyst Says

Posted: 02/27/2014 5:20 pm EST | Updated: 02/28/2014 10:59 am EST



14

Print Email

Discounts

Drive Safe & Save

Adam Jonas isn't Nostradamus, but the Morgan Stanley analyst is predicting the road to complete vehicle autonomy will begin in 2026. What's more, he says the 100 percent market penetration two decades later.

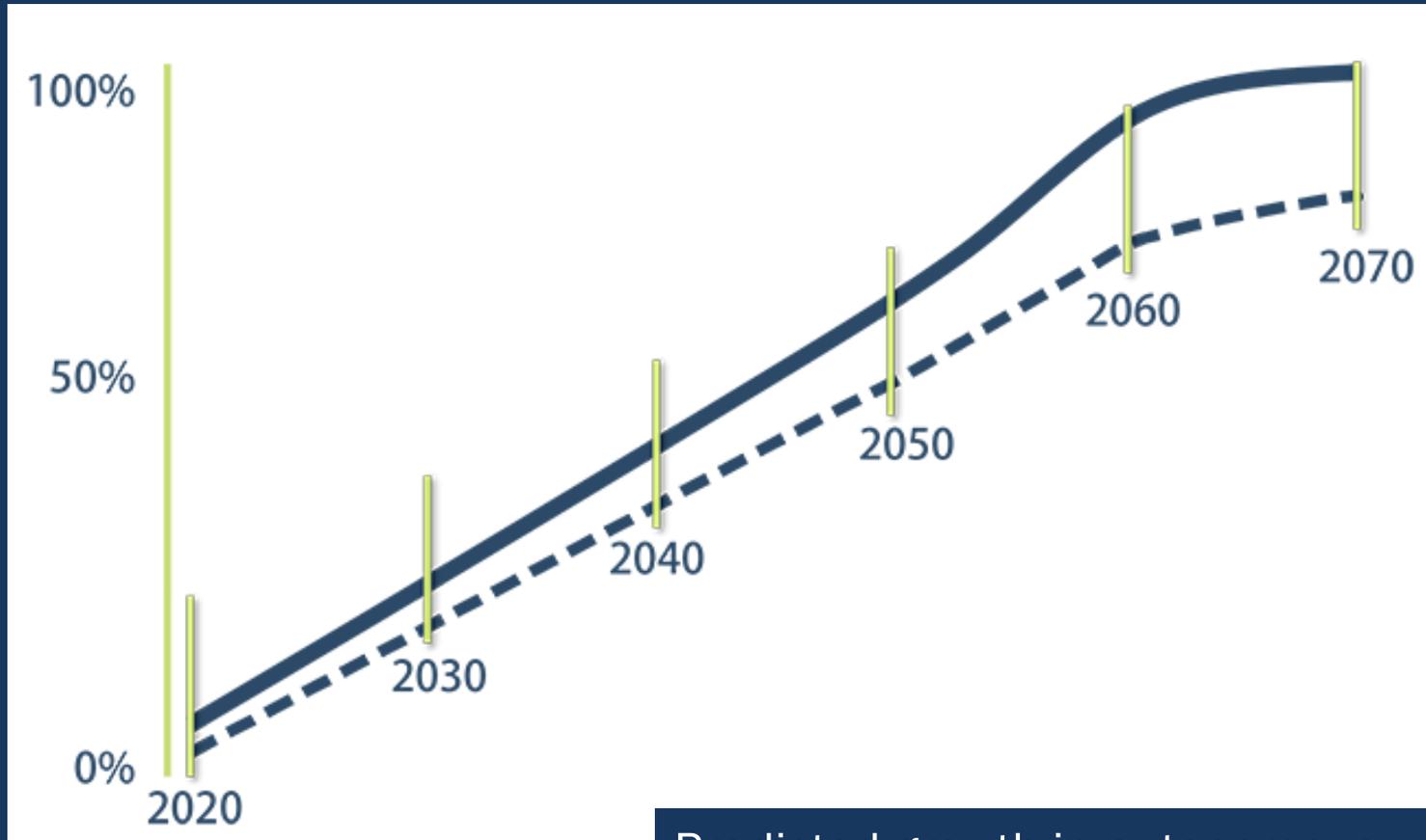
means we'll all be passengers in our cars pretty soon.

This week, Jonas said his company sees "autonomous economic savings globally."

the beginnings of an autonomous car "utopia," overcome liability and infrastructure issues, in 2026. predicts our cars will be able to be driven. All need to remain attentive in the case of an emergency for autonomous cars will not be fully developed.

vehicle evolution.

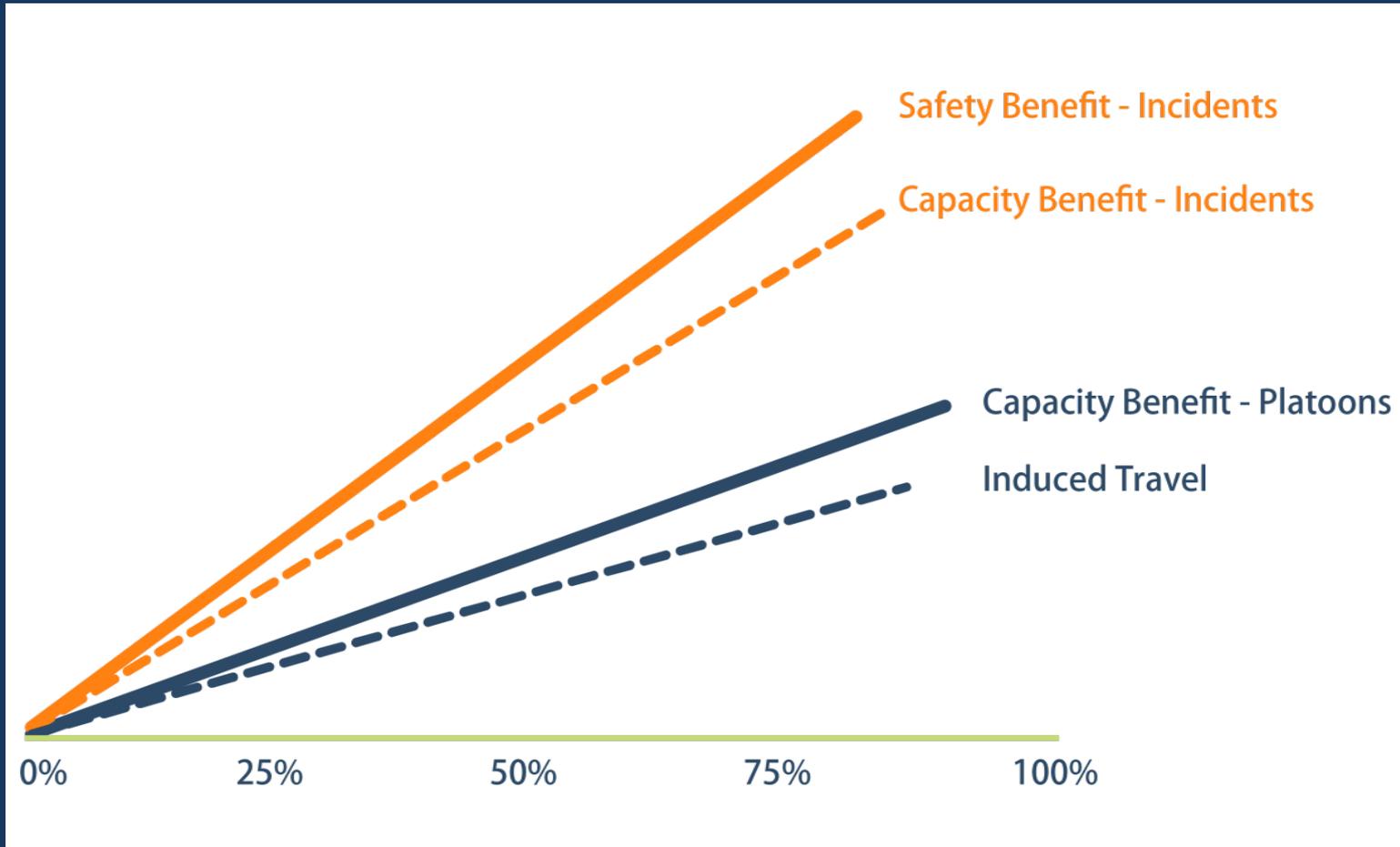
FLEET ABSORPTION



Predicted growth in autonomous vehicle travel, as percent of all highway vehicle miles traveled (VMT).

vehicle evolution.

IMPACTS VS. FLEET ABSORPTION



changes to come?

CAPACITY OUTCOMES

Autonomous
Fleet Mix

Capacity
Increase

50%



20-30%

75%



30-40%

95%

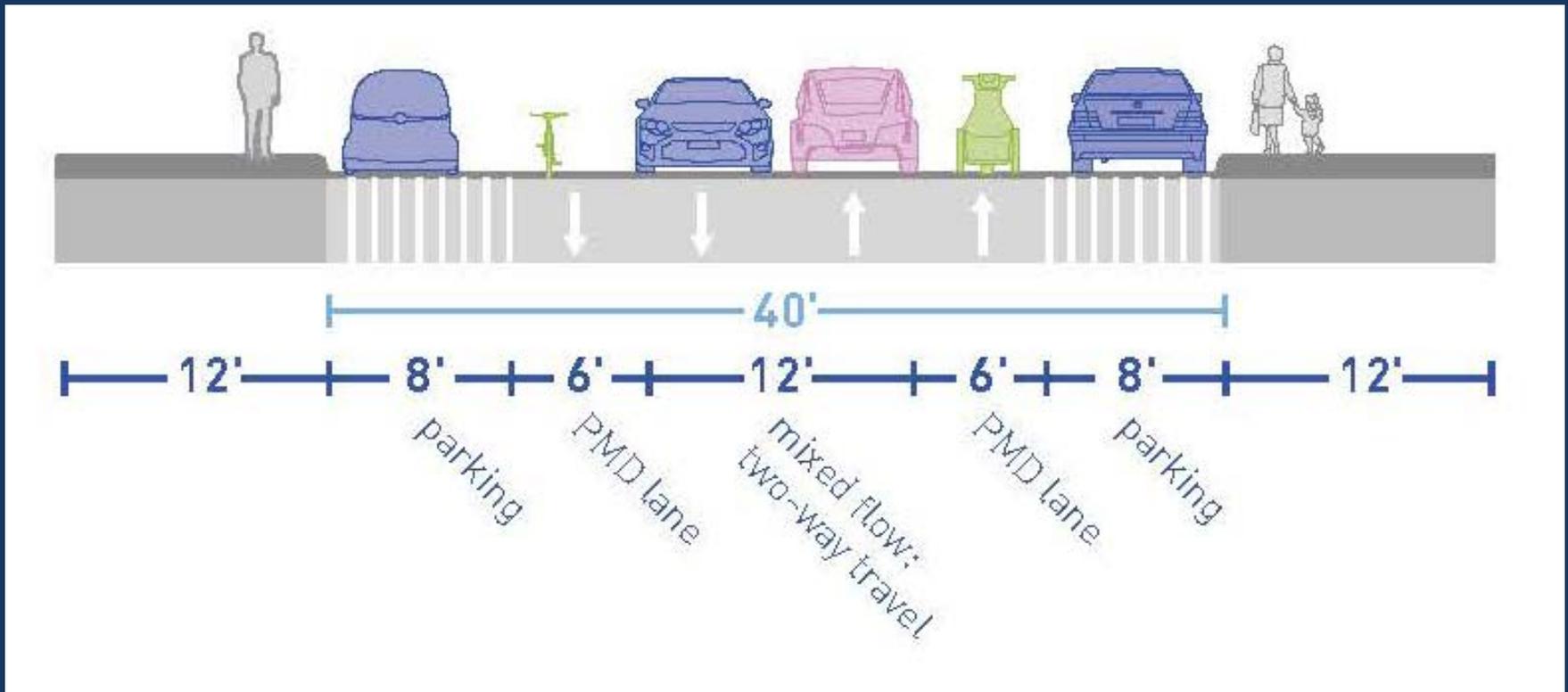


50-100%



changes to come?

ROADWAY DESIGN



vehicle evolution. ■ AUTOMATED & AUTONOMOUS

Issue	Pros	Cons	Planning Question
Safety	Fewere Accidents (automated sensors, controled speed, driver attention)	Still required breakdown accomodations (system failures, auto malfunctions)	Will we need less infrastructure for safety concerns (variable message signs, breakdown lanes)
Capacity	More vehciles fit on the road (connected vehicles, smaller lates)	Possibly greater capaicity need with greater vehicle use	Will we need less road capacity?
Convenience	Under age/blind/etc passengers no parking problems, no navigation,	Car not immediately available, giving up sense of control, more cars on road	Will the perceived loss of independence translate to a better experience?
Physical Change	No road signage, no intersection control	This could be a significant cost.	How much of an investment will be required. Can we incrementally get to a new system?

vehicle evolution.

PLANNING FOR UNCERTAINTY

		WHAT WE WANT	
		Known	Not Known
FUTURE UNCERTAINTY	Certainty	Planning: is a <u>rational application</u> of knowledge	Planning: is a <u>bargaining</u> process
	Uncertainty	Planning: is a <u>learning</u> process	Planning: search for order in <u>Chaos</u>

vehicle evolution.

TODAY'S OBJECTIVE

WHAT WE WANT

Known

Not Known

FUTURE UNCERTAINTY

Certainty

Planning: is a rational application of knowledge

Planning: is a bargaining process

Uncertainty

Planning: is a learning process

Planning: search for order in Chaos



changes to come?



Exhibit 4: Matrix of Shared Values

ASSESSMENT OF VALUES: AGENCIES AND COMMUNITIES			
STATED WFCCS VALUES ¹	AGENCY/ADOPTED PLAN VALUES ²	CONSISTENCY LEVEL	COMMUNITY FEEDBACK LEVEL
<p>Mobility</p> <ul style="list-style-type: none"> Maximize underutilized capacities, integrate modes, and enhance existing infrastructure investments (TIGER) 	<ul style="list-style-type: none"> Optimize traffic mobility by adding roadway capacity and incorporating innovative design and traffic management strategies (UDOT, MAG, WFRC) Increase transit ridership by reducing average trip time (UTA, WFRC) Identify highway congestion and choke points (WFRC) Identify critical corridors and preserve right-of-way (WFRC) Maintain LOS E or better in all major corridors (WFRC) Manage all major corridors to optimize throughput using congestion pricing and ITS measures (WFRC) Promote mobility and accessibility (WFRC 2015) 	<ul style="list-style-type: none"> Agency-centric approach to solving mobility issues misses integration of modes and strategies Minimal mention of congestion in WFCCS project description or RFQ Competition between goals to increase transit ridership and goals to mitigate highway congestion and choke points 	<ul style="list-style-type: none"> Maintaining mobility is a high priority for communities but they are not strongly focused on I-15 strategies Moderate interest in toll roads Low support for other forms of congestion pricing
<p>Economic</p> <ul style="list-style-type: none"> Maximize economic interaction and economic competitiveness of the region (RFQ) Preserve region's economic vitality {job access and mobility} 	<ul style="list-style-type: none"> Promote economic vitality through maintaining, improving, and expanding the transportation system to meet the demands of increased population and employment (WFRC) Promote transit infrastructure to help economic development agencies attract new 	<ul style="list-style-type: none"> Inconsistency in agencies' descriptions of economic goals Stated agency goals are not united on the larger picture of transportation 	<ul style="list-style-type: none"> Moderate priority to community stakeholders Comments focused on encouraging development projects at centers in the south part of Salt Lake County

ASSESSMENT OF VALUES: AGENCIES AND COMMUNITIES			
STATED WFCCS VALUES ¹	AGENCY/ADOPTED PLAN VALUES ²	CONSISTENCY LEVEL	COMMUNITY FEEDBACK LEVEL
<p>(p.d.)</p> <ul style="list-style-type: none"> Strengthen access to economic development opportunities through capital investment (TIGER) 	<p>companies to the Wasatch Front (UTA)</p> <ul style="list-style-type: none"> Promote TOD (UTA) Promote economic benefits of transit to existing companies along the Wasatch Front (UTA) Identify and eliminate congestion points for freight movement (WFRC) 	<p>mobility and economic growth</p> <ul style="list-style-type: none"> Minimal consideration of goods movement and freight 	
<p>Environment</p> <ul style="list-style-type: none"> Preserve environmental sustainability and air quality benefits (RFQ) 	<ul style="list-style-type: none"> Reduce emissions that adversely affect health, quality of life, and economy (UTA, MAG, WFRC) Increase the share of trips using non-SOV modes (UTA, MAG, WFRC) Reduce the likelihood of driving long distances daily (MAG) <i>Promote a healthy environment and a generally improved quality of life (WFRC 2015 DRAFT)</i> 	<ul style="list-style-type: none"> General consistency among agency documents with the exception of UDOT, Little mention of environmental factors other than air quality A goal of reducing emissions conflicts with the mobility goal of optimizing traffic mobility by adding roadway capacity Reducing daily driving distances is consistent with some community 	<ul style="list-style-type: none"> Air quality is a high priority, consistently mentioned in KPI's, TrendLab, and Utah Values Stakeholders also mentioned other environmental resources – viewsheds, recreation, Great Salt Lake, Legacy Parkway Preserve, etc.

ASSESSMENT OF VALUES: AGENCIES AND COMMUNITIES			
STATED WFCCS VALUES ¹	AGENCY/ADOPTED PLAN VALUES ²	CONSISTENCY LEVEL	COMMUNITY FEEDBACK LEVEL
		goals of encouraging growth of centers outside the CBD	
Community <ul style="list-style-type: none"> • Preserve/sustain quality of life for people from all walks of life in our communities (TIGER, p.d.) • Improve quality of life for residents along the Wasatch Front (RFQ) 	<ul style="list-style-type: none"> • Accommodate the needs of an aging population as well as a growing general population, including continued investment in transit and pedestrian friendly communities (WFRC) • <i>Encourage community-friendly and sustainable urban form (WFRC 2015 DRAFT)</i> 	<ul style="list-style-type: none"> • Generally absent from most agency planning documents • The WFRC RTP acknowledges that seniors may have different transportation needs as they age, which will become more important as the Baby Boomers continue into retirement. How should the WFCCS consider the needs of an aging population? 	<ul style="list-style-type: none"> • “Quality of life” not frequently mentioned in community feedback, but probably implied in other community values.
Safety <ul style="list-style-type: none"> • Preserve safety (RFQ, p.d.) 	<ul style="list-style-type: none"> • Reduce the number of crashes and fatal or serious injuries (UDOT, MAG) • Identify the most critical safety needs and select projects to reduce accident rates in specific locations (WFRC) • <i>Improve the safety of the transportation</i> 	<ul style="list-style-type: none"> • General consistency among agency documents with the exception of UTA • Reducing collisions and better incident management is consistent 	<ul style="list-style-type: none"> • Little to no mention of safety in community feedback

ASSESSMENT OF VALUES: AGENCIES AND COMMUNITIES			
STATED WFCCS VALUES ¹	AGENCY/ADOPTED PLAN VALUES ²	CONSISTENCY LEVEL	COMMUNITY FEEDBACK LEVEL
	<i>network for the users and promote the general health of the population (WFRC 2015 DRAFT)</i>	with goals optimizing mobility and reducing congestion	
State of Good Repair <ul style="list-style-type: none"> Consider how solutions impact the state of good repair and life cycle costs of the system (RFQ) Maintain critical infrastructure in a state of good repair (TIGER) 	<ul style="list-style-type: none"> Extend the useful life of our current transportation assets (UDOT, MAG) Fully fund a "State of Good Repair" program (UTA) Protect existing and future transportation systems with maintenance, preservation or reconstruction (WFRC 2011, 2015 DRAFT) 	<ul style="list-style-type: none"> Consistency among agencies in recognizing importance of state of good repair How is our ability to maintain state of good repair affected by our goal to add more capacity? 	<ul style="list-style-type: none"> Little to no mention of state of good repair in community feedback
Accessibility <ul style="list-style-type: none"> Preserve region's economic vitality {job access and mobility} (p.d.) 	<ul style="list-style-type: none"> Improve access to jobs and higher ed opportunities (MAG) Increase transit coverage (UTA) Develop a fully integrated first/last mile strategy (UTA) Build an intermodal transportation system (MAG, WFRC) <i>Promote mobility and accessibility (WFRC 2015)</i> <i>Provide timely transportation access to jobs and higher education opportunities (WFRC</i> 	<ul style="list-style-type: none"> Accessibility is not represented well in our current WFCCS project description Potential competition between MAG/UTA goals depending on meaning of MAG's goals UDOT's goals do not mention accessibility No mention of serving low-income or disadvantaged 	<ul style="list-style-type: none"> Accessibility was high priority in community feedback. Values included increased transit coverage (frequency, speed, routes); active transportation networks; increased connectivity across I-15; increased access to I-15; and increased surface street connectivity.

ASSESSMENT OF VALUES: AGENCIES AND COMMUNITIES

STATED WFCCS VALUES ¹	AGENCY/ADOPTED PLAN VALUES ²	CONSISTENCY LEVEL	COMMUNITY FEEDBACK LEVEL
	<i>2015 DRAFT)</i> <ul style="list-style-type: none"> • <i>Improve mobility and make transportation investment and land use decisions that retain and recruit businesses, labor, provide reasonable job access, promote freight mobility, and keep the region an affordable place to live and do business (WFRC 2015 DRAFT)</i> 	<p>populations, which is a priority at a federal level for TIGER and other grant programs</p>	
<p>Security</p> <ul style="list-style-type: none"> • NA 	<ul style="list-style-type: none"> • Implement a transportation system that can rapidly respond to a variety of emergency situations (WFRC) • Plan a flexible and adaptive transportation system including redundant facilities and remote sensing and management of traffic operations (WFRC) 	<ul style="list-style-type: none"> • Transportation security is not consistently addressed, but relates to other goals – state of good repair, safety, and economic resiliency. How should WFCCS consider security? 	<ul style="list-style-type: none"> • Little to no mention of security in community feedback.

Notes:

1. Stated WFCCS Values were derived from three sources: the Pioneer Corridor TIGER grant application (TIGER), the I-15 Corridor Transportation Study Request For Qualifications (RFQ), and the project description (p.d.) developed by the WFCCS Communications team.
2. Documents reviewed for agency values include MAG’s TransPlan2040, WFRC’s 2011-2040 adopted RTP, UTA’s 2020 Strategic Plan, and UDOT’s 2014 and 2015 Strategic Direction. WFRC’s DRAFT 2015-2040 RTP was also reviewed and goals are noted in italics.



Exhibit 5: Values Assessment Meeting Summary (June 29th, 2015)

Wasatch Front Central Corridor Study Values Assessment Workshop

The Values Assessment workshop for the Wasatch Front Central Corridor Study was held on June 29th, 2015. The purpose of the meeting was to help the team define the agencies' values, determine the appropriate goals to consider to achieve the values, and discuss what each agency needs in order to consider this effort successful. Attendees included Lisa Zundel, Jeff Harris, GJ LaBonty, Matt Sibul, Shawn Seager, Ted Knowlton, Steve Call, Maria Vyas, Lynn Jacobs, Stephen Lawe, Chad Worthen, Dave Smith, Dan Adams, and Siobhan Locke.

An opening exercise demonstrated the nature of system dynamics and how they will affect this planning process. Balancing priorities between two agencies is already challenging, and adding additional participants (and agencies) into the system adds complexity. If agency values are not aligned with one another, we will not achieve the vision for this corridor; in order for this to be successful, it is important to point out where those misalignments are happening to ensure the future is a success. The project team provided a matrix of stated agency values, from several documents as listed below:

- Transplan 2040, MAG
- 2011-2040 RTP and DRAFT 2015-2040 RTP, WFRC
- 2020 Strategic Plan, UTA
- 2014 Strategic Direction, UDOT
- 2015 Strategic Direction, UDOT

Agency values were then compared to WFCCS-related values already expressed in various documents (TIGER grant, UDOT RFQ, and the WFCCS project description), and feedback heard from key person interviews, stakeholders, and the public. This matrix is attached to the back of this summary.

What would constitute success in this corridor for each agency?

Each partner agency was asked what would constitute success for them in this corridor. Responses are summarized below.

UTA

- Focus on ridership numbers, and the idea of carrying more people on our trains and busses in order to meet the travel demand.
- Also focus on increasing our mode share - getting people out of cars and into transit.
- Need to gather funds from each rider: guiding legislation forces UTA to charge a fare and maximize this return.

- Other goals for UTA include personal economy (spending less to get around), reducing congestion, efficient use of resources, serving transit dependent populations, improving the environment.
- The mode of accessing transit is fundamental and speaks to solutions like first/last mile as critical to increasing transit ridership.

UDOT

- Success for UDOT is if alternative mode share is sufficient to require no additional roadway capacity (heads nodded by all other agencies on this point)
- Help the road users understand the impact of their travel along this corridor - the true cost and how they contribute to it
- UDOT goals include education: cost/benefit, paying at the point of consumption, and clearly articulating the tradeoffs of how we are choosing to invest a certain way
- UDOT also interested in freight (ie, dock to dock time), demand management, and person throughput (whether by roads or by transit)

WFRC

- Definition of success - Increase destination accessibility (connecting people to destinations). Doing this by transit improves upward social mobility as a means to enable disadvantaged communities to have the same shot at the American dream
 - Describing it this way relates the pattern of development to transportation and mobility - it's a systems measure
 - Less congestion helps with destination accessibility
- WFRC interested in how transportation solutions can make life better based on a few mode-neutral metrics - destination accessibility is a good example
 - For example, measure the average number of jobs reachable by a household within 20 mins by car and 40 mins by transit
 - More growth in strategic locations - i.e. TODs

MAG

- Success for MAG means increased attractiveness of Utah County as a destination for increased economic development (although this may be a qualitative rather than quantitative goal)
- Utah County is growing from a rural to an urban area - the MAG MPO is less sophisticated in the tools we use to assess. We work with UTA to look for good ridership by mode.
- MAG goal: have government incentivize job creation (related to increased attractiveness of Utah County for economic development)
- Utah County doesn't tolerate delay – complaints about congestion go directly to legislators and back to Carlos and projects are born.

Goal Brainstorming: How do agency values align with corridor goals?

Meeting participants began brainstorming goal statements, pivoting from the categories generally observed in the agency goal documents and heard from stakeholders and the public. This became the basis for developing goal statements for the corridor.

Mobility	Accessibility	Economics	Environment	Community	Safety
Transit as congestion reduction tool	Improve destination accessibility	Reduce household transportation cost (why would we want to increase transit riders?)	Improving air quality through more transit use	Serve populations with transit that can't drive	
Manage congestion such that travel times are reliable	Improve destination accessibility – by transit	Cost effective mix of solutions			
Retain freight mobility by preserving reliability and dock to dock time	Improve economic mobility	Increased attractiveness for new jobs			
Maximize person throughput	Maximize development opportunities (or economic development) at growth	S.G.R.			
	Strategic locations on the corridor				
	Increasing how many people can walk/bike to transit				



Exhibit 6: Executive Agency Briefing (August 28th, 2015)

MINUTES
Wasatch Front Central Corridor Study
Executive Briefing
08/28/15

Attendees: Carlos Braceras, Shane Marshall, Andrew Gruber, Andrew Jackson, Jerry Benson, Lisa Zundel, Jeff Harris, GJ LaBonty, Shawn Seager, Ted Knowlton, Eric Rasband, Maria Vyas, Lynn Jacobs, Dave Smith

1. Goals discussion
 - a. The project team introduced the goals for the corridor study. Several questions/comments arose from the Executive Group on the goals.
 - i. Carlos: our goal should be to have a realistic plan for the future
 - ii. Jerry: wants to see that options like trip sharing, TDM, land use, technology, etc are all going to be considered.
 - iii. The group discussed targets and benchmarks and whether they should be established for this project. Carlos mentioned that the Mountain View Corridor envisioning effort also developed land use plans, which never came to pass – so being realistic in proposed land use changes is important.
 - iv. Andrew G: MAP 21 established performance measurement targets which the agencies will need to be meeting, so perhaps we should be considering some of these. Jerry agreed that having targets would be helpful.
 - v. Overall the Executive Group approved of the corridor goals.
2. Short Term solutions
 - a. The project team discussed what had been referred to as the “short term solutions”, which were 3 projects that UDOT had been planning on building that were briefly assessed in this process. They included a SB GP lane on I-15 from SR-201 interchange to I-215 interchange, Managed Motorways, and a C/D system in Sandy.
 - i. The Executive Group was generally supportive of Managed Motorways, and indicated that it seemed like a good value for the cost. The group had several questions pertaining to construction costs, staffing needs, and where delays would occur.
 - ii. Carlos asked Lynn which project should be built first. Lynn responded that Managed Motorways should be built first. Ted asked if the GP lane was built first and then Managed Motorways, then which project would get the credit for reducing congestion?
 - iii. Jerry asked how the short term projects were selected, whether they were funded, and why there were no transit projects. Lisa responded that the short term UDOT projects were pre-existing projects that were temporarily on hold, so this study team could identify whether they would preclude other long-term solutions from being implementable. Carlos said there was \$100M in the STIP for the GP lane. The group generally agreed that “short term

solutions” wasn’t an accurate descriptor for these projects, given that no transit projects were included, and decided to call them “pre-existing UDOT projects” going forward to reduce confusion about where they came from.